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The Review of the
NOAA National Coastal Zone Management Programs
for
Estuary and Coastal Wetland Protection

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Introduction

This document is an analysis of twenty-nine state profiles that composed the National Coastal Zone Management Effectiveness Study for Estuary and Coastal Wetland Protection conducted by Oregon State University National Coastal Zone Management Effectiveness Study Team. State Coastal Management Program personnel were involved and cooperated with the development of the profiles. These documents have compiled critical data on the United States National Coastal Management Program and related policies, processes, tools and results in a consistent format. They correspond to the twenty-nine State (and United States territory) coastal management programs approved (as of 1995) by the National Oceanic and Atmospheric Administration (NOAA) which have been authorized by the Coastal Zone Management Act of 1972. Though the profiles have been reviewed for technical accuracy by state coastal manager participants in the study, they are considered as an unedited data collection and were not produced for publication.

The coastal zones involved include not only the states that border the ocean, but also those that border the Great Lakes and United States territories around the world. Coastal programs manage a great diversity of areas ranging from the glacier-filled fjords, barrier islands, and tundra of Alaska, to the freshwater wetlands of Michigan on the shores of the Great Lakes, to the tropical Northern Mariana Islands. These estuarine and wetland areas provide a wide variety of natural and social functions. Natural functions include: flood attenuation; habitat for threatened and endangered species; aquatic invertebrates, water fowl, fish and other aquatic organisms; fish spawning areas; marine mammal breeding and resting areas; migratory bird feeding areas; water treatment; groundwater recharge; sediment removal; and many other valuable processes. Social and economical functions in the coastal zones vary widely and include: tourism; commercial and recreational fishing; forestry and pape; mills; ship building; agriculture; oil an gas development and petroleum storage; mining; construction; and many other activities. This represents a highly diverse set of social functions, economies and natural systems. Consequently, resultant policies and priorities given to conservation strategies show much regional

variation.

Realizing the circumstances and resultant policy recommendations are different for each state or territory, the purpose of this review is to investigate how these programs are developed and administrated. The focus is on the methodology used to develop and manage programs and policy, rather on the resultant policy recommendations used to manage specific resources or activities at particular locations. Organizing the information in this way, and describing key lessons learned in the last twenty-five years in the United States will provide a setting which will aid decision makers at the Department of Fisheries and Oceans Canada to assess their state of readiness to deal with coastal zone management and program development issues that may be valuable in planning a national framework for ICZM in Canada.

The report has 2 segments:

- ***Individual State Analysis:*** This segment contains separate sections, in tabular form, describing each state. Note is given particularly to approaches that have contributed to effective public stakeholder involvement and co-manager or joint decision making processes. Methods of information sharing amongst government information sources, public and private sector cooperators partners are also discussed. Conflict resolution processes in each of the case studies are addressed. Finally, lessons learned, especially relating to reducing friction related to overlapping governmental agency jurisdictions, are clarified.

- ***Summary:*** This segment provides a national view of the initiative pointing out the common elements among the state programs as well as unique approaches that have contributed to successes. This section includes a general summary of lessons learned.

Individual State Analyses

ALABAMA	
Objective	**Comments**
A. Background	• Generally, little development on the coastal area, though some localized development pressure in some areas (e.g. the southern Baldwin County has extreme development pressure) • Major industries include paper mills, government agencies, tourism and recreation, industrial/chemical plants, fishing and seafood processing, ship building and repair, farming, residential
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• The term "coastal area" is used instead of "coastal zone" • Consists of tidal waters, tidal and coastal wetlands, low-lying upland areas, aquatic grass beds, emergent marsh, swamp forest, bottom land hardwood forest, pine and savanna wetlands • All lands and waters seaward of the 10 foot contour level and up to the state jurisdiction limit
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Program was networked to include 32 separate agencies or existing laws (including Alabama Water Improvement Commission; Alabama Department of Conservation and Natural Resources, State Forestry Commission, etc.) • State agencies must be consistent with Alabama Department of Environmental Management's policies and regulations; federal consistency standards are facilitated by joint permit application, notice and pre-application conferences; U.S. Army Corps of Engineers (USACOE; Harbors Act Section 10 & Clean Waters Act Section 404) permits must be consistent (relates to federal consistency standards) • Alabama Department of Environmental Management and USACOE involved in joint permit applications process • Pre-project interagency coordination meetings are important especially for federal projects • Memoranda of agreement/understanding with state agencies facilitate permitting process • Formal inventory of wetlands not used; instead, reliance is placed on the coastal area board's personal knowledge • Advanced identification planning is conducted with U. S. Environmental Protection Agency (considered of low importance)
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• See Section C 5 • Public comment is part of the permit process • Alabama Coastal Area Management Plan (ACAMP) implements its wetlands policies by collaborating with the development community; consultation and pre-application conferences are an integral part of the process
3. State Management of Entire Coast • As one unit or are there county programs or sub-	• Department of Conservation and Natural Resources has jurisdiction over state-owned water bottoms, submerged lands up to the mean high tide line • Alabama Department of Economic and Community Affairs (ADECA) (planning oriented) responsible for planning and overall grant administration. ADECA works with town governments on planning projects

ALABAMA	
Objective	**Comments**
components?	• Alabama Department of Environmental Management (ADEM): (regulatory oriented) determines federal consistency with the goals and policies of the ACAMP and oversees coastal permit program • State Forestry Commission oversees forested wetlands • Majority of non-tidal freshwater wetlands are privately owned with the only oversight being state water quality certification (under Section 401 of the Clean Water Act)
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Considered of low importance • 3 Geographical Areas of Special Concern (GAPC's); 2 Areas for Preservation Restoration were designated • No information on how these were integrated or coordinated • Special Area Management Plans (SAMPs) not used
5. Case Studies and Other Lessons Learned	• Unique form of forestry performed in the Tensaw-Mobile delta: trees are cut above ground level allowing the remaining stump to rapidly regenerate into a healthy tree and lesson the impacts of logging • ADEM works with developers (in projects greater that 5 acres) to locate development away from wetlands in a given property a) This has resulted in substantial protection to wetlands, while avoiding the permitting process b) Deed restrictions limit the activities on the property upon transfer of property rights

ALASKA	
Objective	**Comments**
A. Background	• Alaska's coastal topography is highly diverse, containing glacial fjords, barrier islands, rocky headlands, river deltas and estuaries, remote islands, tundra and flood plains • Most of the population resides in the coastal zone • The economy is based on coastal activities such as oil and gas development, mining, commercial and recreational fishing, forestry and tourism • In 1985 coastal GNP was 85% of the state GNP • Commercial and private development is a threat to estuaries and coastal wetlands
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Seaward from the shoreline, 3 miles to territorial sea • Inland boundary is variable: 200 feet to 200 miles • Boundary standards include areas of direct interaction and direct influence with marine waters

ALASKA	
Objective	**Comments**
	• Inland boundary based on biophysical features and areas of indirect influence having significant impacts on the coastal zone, such as waters possessing anadromous fish
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• The Alaska Coastal Management Program (ACMP) is networked with other agencies, requiring the existing regulatory authority of agencies to implement the program • Federal permit applications and public notices with a 30-day comment period are used as coordination tools • ACMP uses agency specific Memoranda of Agreements to aid in coordination • Division of Government Coordination (DGC) was created to coordinate federal consistency reviews, coordinate the in-state review process and administer the ACMP. It developed the State Consistency Review Process which streamlined the process, increased local participation, and facilitated conflict resolution. When making decisions that affect a district, DGC's concept of "due deference" causes the responsible state agency to evaluate a coastal district's expertise and interests. DGC would coordinate activities that require a federal permit or permits from more than one state agency. A state agency will review activities that require permits from only that agency and no federal permits. • DGC and resource agency provides pre-application assistance • DGC provides financial assistance to agencies for implementation and enforcement of ACMP • National Wetlands Inventory (NWI): 30% of Alaska has been mapped; mapping continues at 2% per year • Localized GIS, database and record keeping for wetland management purposes: DGC, Army Corps of Engineers (USACOE), Department of Natural Resources (DNR), and Department of Fish and Game (DFG) have databases on permit information; DNR and DFG also use GIS; a GIS based boundary map that is complete for the state is available as a base map for other mapping projects • Federal Clean Air Act and Clean Water Act (CWA 401) standards are incorporated into ACMP; no special standards for wetlands, but general Alaska water standards are stricter that CWA
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Education and awareness programs: Alaska Water Watch Program; Sea Week Curriculum; USACOE trains agency staff; DFG conducts education projects • Anchorage Wetlands Management Plan (see Section C 5)
3. State Management of Entire Coast • As one unit or are there coastal programs or sub-components?	• With ACMP approval, the Alaska Coastal Policy Council (CPC), composed of governor appointed membership of 7 agency commissioners and 9 public members, was created to develop coastal policies, review and oversee implementation of the coastal program • The 35 coastal districts can voluntarily create specific inland boundaries under their Coastal District Management Plans, (program created by CPC) to address specific needs and increase protection of local areas in a state that has vast regional

ALASKA	
Objective	**Comments**
	differences; CPC reviews these plans for consistency with the ACMP, then submits the plans to NOAA for formal inclusion into the ACMP by routine program amendment • Coastal Districts are created from boroughs and cities; Coastal Service Resource Areas are created in areas without formal local government • Coastal District Management Plans dictate water and land use regulations administered by municipalities and state agencies • Three main implementation agencies (Department of Fish and Game, Department of Natural Resources, and Department of Environmental Conservation) administer existing regulations according to the ACMP with wetland regulation the responsibility of each agency
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Administered by DFG, most sanctuaries and refuges are not integrated into ACMP; however, ACMP does provide additional protection within local plans with the use of Areas which Merit Special Attention
5. Case Studies and Other Lessons Learned	• Anchorage Wetlands Management Plan (1982) resulted from a two-year co-operative Special Area Management Plan-like process between state and federal agencies, local developers and environmental groups • This is an example of Coastal District Management Plan • Relatively successful at limiting wetlands impacts and loss between 1982 and 1990, especially with high population growth rates • Initial plan had problems because it designated conservation, preservation and development categories based on land **ownership** rather than value • Result: wetlands that should have been in the preservation category lacked protection • New system developed in 1995 (using A, B, C, and C Wetlands) considers **value** to a greater extent than ownership • It seems to offer greater protection to high value wetlands while easing reducing development to low value areas

AMERICAN SAMOA (TERRITORY)	
Objective	**Comments**
A. Background	• This territory consists of five inhabited high islands, one inhabited atoll and one uninhabited atoll • Population is mainly between the ocean and lower slopes, limited by topography • Vegetation ranges from coastal vegetation, littoral scrub, mangrove areas, to montane and cloud forests
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Includes the island of Tutuila, the Manu'a Islands, Aunu'u Island, Rose Island, and Awam's Island, Territory of American Samoa, and all coastal waters and submerged lands for three nautical miles seaward
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Development Planning Office (DPO), is responsible for federal consistency reviews • Project Notification and Review System (PNRS) review process includes the Project Review Board (also known as PNRS Board) with members from various agencies; primary project review authority and must unanimously authorize projects; this program has given wetlands a high level of protection; water quality State CWA 401 certification part of PNRS process • PNRS Board has administrative "stop over" authority and can conduct field inspections • The Project Review Board provides a setting for negotiation and conflict resolution • Potential impacts from major projects may be discussed at a pre-approval public meeting (i.e. before Project Review Board makes the permit decision) • All territorial agencies must act consistently with the American Samoa Coastal Management Program (ASCMP); consistency determination is the responsibility of the ASCMP manager following PNRS decisions • A single permit process covers all agency requirements • Village liaison/facilitator program has enabled wetlands delineation, mapping, surveying, and possibly wetlands regulation • GIS and computer databases for wetland management are being developed; however, these systems are not yet operating
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Awareness campaign (e.g. campaign for addressing solid waste debris problem in wetlands) and the village facilitator program (see Section C5) have been successful in educating the public about wetlands; promotes local involvement in wetland inventories, delineation, local wetland protection ordinances and local enforcement • See Section C5, Village Liaison Facilitator Program
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• This is a networked program involving many key agencies (e.g. Department of Public Works, Zoning Board, American Samoa Department of Environmental Protection). Department of Parks and Recreation has jurisdiction from mean high water mark a depth of 10 fathoms • Development Planning Office (DPO) is the lead agency for the ASCMP. DPO has authority to regulate wetlands with the Land Use Permitting System

AMERICAN SAMOA (TERRITORY)	
Objective	**Comments**
	• American Samoa Coastal Management Program (ASCMP) manager divides Land Use Permit Applications into major and minor categories, and the Project Review Board makes the permit authorization decisions • Non-tidal, freshwater wetlands are under jurisdiction of ASCMP
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plans are used • Special Management Areas (SMAs) are designated (e.g. Pago Pago Harbor; mangrove areas of Nu'uuli and Leone Palas) • Sites are managed to minimize cumulative impacts • SMAs have unique characteristics and are under heavy development pressure • Public hearings required for proposed development in SMAs (except Pago Pago Harbor) • NOAA administers Fagatele Bay National Marine Sanctuary
5. Case Studies and Other Lessons Learned	• **Village Liaison/Facilitator Program:** excellent at maintaining village centered traditional government while incorporating centralized regulations • Each village selects the liaison; ASCMP selects the facilitator; the village adopts a wetland protection resolution, and village ordinances enforced by the Village Council, with guidance from the liaison and facilitator • **Role of facilitator:** organize village meetings in which wetlands issues important to the village are discussed in a village setting • Village delineates an area of disagreement by using the U. S. Army Corps of Engineers manual; then, area is professionally surveyed and mapped; formal meetings and negotiations are done to resolve the conflict and set the final wetland boundary which includes an agreement which describes use inside the wetland; wetlands delineations are used by the PNRS Review Board

CALIFORNIA	
Objective	**Comments**
A. Background	• Coastal zone extremely diverse: rainforest in the north; highly developed, industrialized and desertified in south • Coastal GNP (in 1985) was 56% of state total • 15 coastal counties and 58 cities • Major industrial ports; many smaller fishing and recreational ports
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• There are two main divisions to the coastal zone • San Francisco Bay area (separately managed by San Francisco Bay Conservation and Development Commission-BCDC): • Includes the bay, from open water to the Mean High Tide line, 100 feet inland of Mean High Tide line, and marshlands up to 5 feet above mean sea level

CALIFORNIA	
Objective	**Comments**
	• Conveniently located landscape feature used to set official limit of BCDC jurisdiction • Remainder of coastal zone is from Oregon to Mexico, and seaward to 3 nautical mile territorial sea boundary • Inland boundary usually 1000 yards; can be several hundred feet in urban areas or 5 miles wide in other significant areas
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	

1. Conflict Resolution, Coordination or Harmonization Processes
• Between adjacent regions agencies
• Between public stakeholders
• Coordination with adjacent states
• Information sharing
• Any large-scale regional accords?
	• The three state agencies (Francisco Bay Conservation and Development Commission (BCDC) , California Coastal Commission (CCC), and California State Coastal Conservancy (CSCC)) work like networked state programs. BDCC and CCC have few overlaps
	• Uses a state-local partnership program to control development in the coastal zone: statewide estuary and wetland protection policies (implemented by a Coastal Development Permit), jointly administered by California Coastal Commission (CCC) and local governments with approved Local Coastal Programs (LCPs; approved by CCC); part of the LCP development process includes taking the cities and counties designating environmentally sensitive areas and environmentally sensitive development areas; through this program local governments can take over administration of the Coastal Development Permit process for most unplands (this included wetlands); CCC can still get involved in local permitting via appeals process; in practice, CCC is involved in most of the wetlands-related decisions
	• Inventory, Mapping and Wetland Change Monitoring:
	  • For San Francisco Bay: BCDC uses National Wetlands Inventory for regulatory and restoration uses; wetland change not systematically studied
	  • For California Coast: maps and data are shared among state agencies; Regional Cumulative Assessment Program (RzCAP) conducted a detailed wetlands change assessment with photographs over a 16 year period and helped identify the nature of wetland management problems (Monterey Bay Region)
	• Suisun Marsh in San Francisco Bay is divided into a primary area (with BCDC permitting) and secondary area (local government permitting) where BCDC has no direct authority. In the secondary area, local decisions can be appealed to the BCDC
	• For San Francisco Bay, there is an agreement between USACOE and BCDC for Clean Water Act Section 404 permits where USACOE issues permits after BCDC; also, there is "consistency language" in the permits
	• Memoranda of Agreements Understanding exist for federal activities requiring a permit and for activities directly affecting the coastal zone (these must be consistent with California Coastal Act policies and LCPs);
	• Regional Water Quality Control Boards coordinate with BCDC and CCC, but are responsible for 401 water certifications
	• State Lands Commission is responsible for leasing land; they consult with BCDC and there is much informal discussion; CCC works closely regarding estuaries with the Commission with a significant connection to oil and gas development
	• CSCC projects must be consistent with CCC, LCP or BCDC policy
	• On the California Coast, violations are limited by threat of penalty but CCC has little enforcement capacity

CALIFORNIA	
Objective	**Comments**

	• Mitigation banking is effective for resolving conflicts between public interest in wetland protection and infrastructure development
	• San Francisco Bay uses a joint state-federal permit applications; USACOE, EPA, Regional WQCB and BCDC review joint application and negotiate dredging issues under the Pilot Dredge Material Management Operation
	• BCDC, local governments, USEPA and the Regional Water Quality Control Board are developing a wetlands protection plan. EPA's and WQCB's water quality and education initiatives are combined with BCDC's efforts to make local government plans consistent with state and federal policies
	• CCC uses a joint permit with USACOE
	• BCDC is composed of members from USACOE, EPA, the public, county boards, elected officials and state agency representatives
	• BCDC encourages many informal coordination meetings and contact with applicants before application for permits, participates in pre-consultation meetings with USACOE, and USACOE interagency meetings with California Transportation
	• CCC emphasizes coordination with local governments; pre-consultation is very useful on large projects
	• Memoranda of Agreements Understand are used by both CCC and BCDC
	  • San Francisco: BCDC: with regional WQCBs, with State Water Resources Council Board, USACOE, others
	  • Coastal Area: CCC: for specific projects or purposes
	• BCDC used to maintain a database of federal consistency permit actions, published each year in the annual report which will be replaced with a GIS-based system for tracking permit actions
	• CCC has a permit tracking and outcome database, a tracking system for mitigation and non-compensatory projects, database to track federal consistency
	• A GIS system for the coastal zone is being developed by CCC to provide information to CCC Staff, local governments, decision-makers, and others; Assisted by NOAA, CCC is integrating GIS data from other agencies with aerial photography from NOAA flights for watershed and wetland inventory, analysis and planning, wetland permit and violation tracking, and land use habitat change detection
	• CSCC keeps the following: a library resource enhancement plans; GIS southern California wetland inventory; a wetland acquisition resource enhancement database; monitoring records for CSCC-funded projects; and a developing database for all CSCC projects.
	• BCDC's permit process is credited with dramatically reversing the trend of wetland loss to gradual gains

2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• For San Francisco Bay BCDC uses mapping tools from University of California (Berkley), NOAA and U.S. Fish and Wildlife Service (USFWS) • CSCC, along with other agencies and private groups, are involved with wetlands acquisition

CALIFORNIA	
Objective	**Comments**
	• For many projects, letters of agreements exist between CSCC and public and private organizations • CSCC publishes a coastal issues magazine and a wetlands conservation guide; trains and help in start-up of non-profit organizations; provides grants, planning, or capacity building; goal is to increase public participation and public awareness • BCDC and CCC work together on public and developer education
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• BCDC separately manages San Francisco Bay • California State Coastal Conservancy (CSCC) has non-regulatory responsibilities (e.g. distributes grants, coordinated funding) for the entire coast, plus all coastal and San Francisco watersheds (including BCDC and CCC areas); responsible for: resource enhancement, acquisition, technical assistance, public information • California Coastal Commission (CCC) has regulatory, planning, consistency review responsibilities for the rest of the coast • Local governments must develop Local Coastal Programs (LCPs) • Local governments are always involved in the planning process in the San Francisco Bay • CSCC carries out resource enhancement projects in coordination with CCC and BCDC. BCDC identifies opportunities, approve plans, determine federal consistency and issue permits

4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Three are three types of designations on the California coast
	  • Environmentally Sensitive Areas (designated by LCPs)
	  • Environmentally Sensitive Habitat Areas (designated by LCPs)
	  • Sensitive Coastal Resource Areas
	• San Francisco Bay is a Special Area Management Plan
	• 7 Special Area Management Plans have been developed

5. Case Studies and Other Lessons Learned	• California State Coast Conservancy
	  • Unique partnership with CCC and BCDC
	  • Via non-regulatory authorities and funding: acquires property interest in threatened wetland resources; facilitates planning, construction and monitoring of nonregulatory wetland restoration enhancement.
	  • Plan development, mitigation banks (for smaller projects) and dispute mediation services are valuable for project facilitation, conflict resolution and difficult compensatory mitigation issues
	  • For wetland restoration, helps to create land trusts and develop their ability to raise funds
	  • Has created a watershed action planning program for restoration using volunteer groups

CALIFORNIA	
Objective	**Comments**

	• Consists of the most funded and effective programs and services among coastal states
	• Regional Cumulative Assessment Program (ReCAP) Pilot Study
	  • Detailed analysis of cumulative impacts to Monterey Bay
	  • Recommended that a regional framework be established to address cumulative adverse impacts to wetlands in order to set priorities, coordinate, provide technical assistance, guide preparation and implementation of wetland watershed management plans

CONNECTICUT	
Objective	**Comments**
A. Background	• Strongly developed shoreline, 25% of which is residential • 45% of state population in coastal towns • Industrial uses: ship building, petroleum storage, mineral extraction • Commercial finfishing and shellfishing less important than in the past but still important locally • Sportfishing, recreation, water tourism becoming increasingly important

B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Inland boundary of 36 coastal municipalities, seaward to state boundary in Long Island and Fisher Island Sounds
	• Two tiered approach:
	  • Tier 1 is from offshore jurisdiction line to 1. The 1000 foot linear setback from mean high water mark, 2. Inland boundary for tidal wetlands, 3. Interior contour elevation of 100 year coastal flood, whichever is furthest inland; coastal resources are in Tier 1
	  • Tier 2 is from Tier 1 boundary to the upland extent of the 36 coastal municipalities; activities in Tier 2 are evaluated for impact to Tier 1

C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions agencies • Between public stakeholders • Coordination with	• Connecticut consulted with Rhode Island and New York in determining its coastal zone boundaries • Long Island Sound coordinated health risk assessment with New York • Pawcatuck River Estuary Management Plan began in 1989 with Rhode Island; included citizen's advisory committee, Office of Long Island Sound Programs (OLISP) and Rhode Island CZM Staff to coordinate conservation efforts; there are interstate memoranda of agreements with Rhode Island • Department of Environment Protection (DEP) responsible for state/federal/local coordination, by a group within the department called the Coastal Area Management Unit • U.S. Fish and Wildlife Service (USFWS) have Memoranda of Agreement to use grant money for wetlands restoration

CONNECTICUT	
Objective	**Comments**

adjacent states
• Information sharing
• Any large-scale regional accords?
	• DEP provides information and technical assistance to municipalities, ensures public participation, and provides long-term planning; investigates complaints
	• Information sharing
	  • State is digitizing photography and creating GIS data layers (centered at Avery Point LIS Resources Center) to make data available electronically
	  • Permit applications are checked with Natural diversity database to assess habitat impact
	  • Aerial photography identifies illegal activities
	• OLISP determines federal and state consistency; looks at local plans and also determines consistency with the CZM program
	• Federal agencies must be consistent with Connecticut Coastal Management Plan (CCMA); however, a state permit is not required
	• State agency plans must be consistent with CCMA
	• U.S. Army Corps of Engineers (USACOE) and Coast Guard permits (bridges section) require joint state federal application
	• Major projects are guided by multi-agency pre-application meetings
	• Local municipalities are responsible for compliance monitoring and enforcement

2. Partnering arrangements (State/Private Sector) to Achieve Goals of Program?	• Education and awareness instruments include: the Ocean Quest Science Center supported by OLISP; CT River Special Area Management Plan (SAMP) process included field reports and newspapers; OLISP video tape targeted to children relating to Long Island Sound; education efforts are an important part of the school curricula; OLISP may create a WWW web information site • Connecticut River (SAMP) development task force is composed of local town members, federal agencies, USFWS, conservationists, and local businesses • State parks coordinate with OLISP to have wetland beach areas protected by the state and Nature Conservancy
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• OLISP manages all tidal wetlands, is the primary permitting agency for coastal wetland programs, and is involved with wetland restoration; coastal permits are required for state projects if activity is below the mean high tide line • Each municipality has an Inland Wetlands Commission for local permitting decisions for freshwater wetlands • Municipalities must administrate mandatory coastal site reviews and may prepare voluntary municipal coastal programs (which must involve coastal resources planning, including considerations of where uses activities should occur); all development plans must be reviewed by local site plan review board before start of development (funding for this is granted through federal CZM funding; federal funding is an incentive for this voluntary program); the state may address specific concerns if required; enforcement is municipality responsibility • All activities in Tier 1 are covered by permits

CONNECTICUT	
Objective	**Comments**
	• Towns make voluntary local harbour plans consistent with the coastal management program, reviewed on state level by OLISP (other agencies, especially Department of Transportation) and USACOE

4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plans are used
	  • e.g. Pawcatuck River Study
	  • e.g. Connecticut River SAMP (under development)
	  • Goal is to provide a comprehensive management plan and provide resource information such as maps and GIS data layers for USACOE and Wildlife Division use
	  • Aquatic resources of lower River is the focus of the plan
	• Geographical Areas of Particular Concern (GAPC's) used but since permit programs cover these areas, designation of GAPC's are not very useful
	• Coves and Embayments Program funds certain municipalities for protected areas

5. Case Studies and Other Lessons Learned	• Non-regulatory Restoration Program: focus is on restoring degraded salt marshes and on brackish and tidal areas • Draft restoration plan includes a list of potential restoration sites • A joint New York Connecticut habitat restoration plan is involved in the site determination

DELAWARE	
Objective	**Comments**
A. Background	• Development pressure mainly from in intensification of present uses • Northern Atlantic coast is state owned; south is primarily private beach and resort development • Delaware Bay: south, narrow beaches, summer colonies; north, industrial land use development, urbanization
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Coastal strip, averaging 4 miles in width • Further divided into Atlantic coast and Delaware Bay
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions agencies • Between	• Department of Natural Resources and Environmental Control (DNREC) developed consultation agreements with Departments of Agriculture, Transportation and Development to avoid or minimize impacts on freshwater wetlands • National Wetland Inventory being updated to GIS to clarify state tidal wetland jurisdiction; DNREC is updating and improving a permit tracking database and updating a consistency decision tracking database to GIS; Delaware is a test state for the NOAA-SEA COMPS GIS database program that tracks wetland alterations and non-point pollution problems • Interagency coordination monthly meetings take place (Joint Permit Processing Group)

DELAWARE	
Objective	**Comments**
public/stakeholders • Coordination with adjacent states • Information sharing • Any large scale regional accords?	• Memoranda of agreement exist between Departments of Agriculture, Transportation and Office of Development • DNREC conducts enforcement and surveillance for tidal wetlands with Environmental Protection Officers • DNREC's Division of Soil and Water Conservation is responsible for federal consistency (it also reviews USACOE Section 10/404 permits against Delaware Coastal Management Program policies
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Division of Fish and Wildlife (DNREC) conducted a *Phragmites* control program; it developed a herbicide and burn technique; resulted in a 50:50 state funded cost-share program with private landowners • DNREC's Division of Soil and Water Conservation is involved with some public education, e.g. secondary school wetlands programs, "adopt a wetland" program

3. State Management of Entire Coast
• As one unit or are there county programs or sub-components?
	• DNREC manages estuaries and wetlands
	  • Division of Water Resources administers permitting program for estuaries, coastal waters and wetlands
	  • Division of Park and Recreation is responsible for acquisition and environmental education
	  • Division of Fish and Wildlife is responsible for wetland restoration (also administrates acquisition)
	  • Division of Water Resources, Wetlands and Aquatic Protection Branch also has a wetland program for nonstructural erosion control
	• Land uses regulated by local governments; local government notifies state if wetland impact is possible; state cannot enforce recommendations on non-tidal areas but may assume jurisdiction for projects on tidal wetlands

4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Conservation and Management Plan for tidal wetlands is CZM-funded; provides statewide management guidance; similar initiative funded by the Environmental Protection Agency (USEPA) for freshwater wetlands • Pea Patch Island (1000 acre marsh and heron rookery) is a Special Area Management Plan
5. Case Studies and Other Lessons Learned	• N/A

FLORIDA	
Objective	**Comments**
A. Background	• Florida has high water table and low topography; all places in the state are less than 70 miles from either coast

FLORIDA	
Objective	**Comments**
	• Much agricultural land has been converted to residential with increasing population • Hurricane and tropical storms are a major concern • Industries: tourism is the leading industry; sand, shell, phosphate, oil and gas mining; recreational boating is popular; recreational and commercial fishing
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Entire state, except for federal lands and lands belonging to the Seminole Indian Tribe, is in the coastal zone • Extends 3 nautical miles offshore for Atlantic coasts and 9 miles for the Gulf coasts
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Department of Environmental Protection (DEP) keeps and updates a state natural resource atlas every five years and has the Permitting Application and Tracking System; Florida has a natural areas inventory; DEP inspects the site of each proposed project; some local governments have mapped wetlands; Florida Assessment of Coast Trends gives indicators for environmental, growth management,, economic and social values and evaluates the Florida Coastal Management Program (see: http://www.fsu.edu~cpm/FACT) • Department of Community Affairs makes sure decisions relating to federal consistency occurs and acts as facilitator, many agencies are involved (especially DEP) but if one does not find a project consistent then it is stopped. Governor's Office can review projects for consistency and often uses inconsistency to hold back a project • DEP and Wetland Management Districts operate under Memoranda of Agreement (MOA) for mitigation and wetlands permitting • U.S. Army Corps of Engineers (USACOE) and DEP also operate under MOA: they use joint public notices; dredging and filling projects need a joint permit
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• DEP is developing the Ecosystem Challenge Awards System to encourage ecosystem management • Public hearings are part of the Coastal Management Act • Also see Section C5
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Environmental Resources Permit (ERP) is the main state level regulatory system giving authority to the Department of Environmental Protection and Water Management Districts over tidal and non-tidal wetlands (there are 5 regional water management districts) • Department of Community Affairs is the lead agency for the Florida Coastal Zone Management Program; Clean Water Act Section 401 certification is part of the ERP process • Regional councils must develop plans to be followed by local governments • Local land-use plans must follow state criteria; if local plans do not have regulations acceptable to the state that is applying to Areas of Critical State Concern then the state formulates and adopts regulations

FLORIDA	
Objective	**Comments**

4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• There are some Special Area Management Plan-like programs (e.g. Charlotte Harbor Resource Planning and Management Committee was a coordinated regional, county and state effort to protect mangrove areas around the harbour)
	• There are 4 types of Geographical Areas of Special Concern (GAPCs) described in the Florida Coastal Management Program:
	  • Aquatic Preserve Systems, have biological, aesthetic and scientific value
	  • State Wilderness Systems, low intensity use such as hiking, fishing, hunting
	  • Areas of Critical Scientific Concern, strengthen protection when local plans and permitting provide too little protection; CZM money used to fund process of state development and implementation of plans and permit review
	  • Areas for Preservation and Restoration, involves acquisition of valuable land

5. Case Studies and Other Lessons Learned	• Cockroach Bay Project
	  • Conducted by the Southwest Florida Water Management District to provide wildlife habitat, improve water quality from agricultural stormwater runoff, and evaluate restoration stormwater effectiveness
	  • 17 person Cockroach Bay Restoration Alliance responsible for coordinating and overseeing the wetlands, uplands, and stormwater treatment strategies
	  • Trying to make cooperative agreements with local governments, the state and others to stretch financial resources

GUAM (TERRITORY)	
Objective	**Comments**
A. Background	• Principal economy is tourism, construction-related, less reliant on U.S. Military spending than in the past • There is a tourism infrastructure increase due to military downsizing; abundant golf courses and hotels have been developed to bolster the economy • Experiences tropical storms, typhoons and hurricanes
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Entire island, plus the 3-mile territorial sea
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Attorney General's Office (and others) are developing a system that will direct fines revenue to environmental funds administered by environmental agencies • Each networked agency can comment on federal consistency determinations; these ensure that environmental safeguards are met; these conditions are required all USACOE permits; this consistency determination controls federal development • Guam Bureau of Planning has a database of permitting information (applicant name, village, lot number, proposed use, zoning and whether it was approved , denied or conditioned). National Wetland Inventory was adopted as the official inventory; included in a GIS system that includes data layers on lot boundaries, power grids, water and sewer systems, flood hazards, seashore protection measures, and limited habitat information • U.S. Corps of Engineers (USACOE) permit for CWA Section 401 Certification is usually obtained before obtaining a permit from the GUAM Environmental Protection Agency (EPA) • The Recreational Water-Use Master Plan is (RWUMP) designed to alleviate conflicts between water users such as fishermen, windsurfers, parasailing, swimmers, etc.; it also restricts activities when fish are migrating • Agencies coordinate closely with USACOE; there is a good relationship between Regional EPA and its local office; they interact closely • Guam EPA and Department of Agriculture enforce wetlands regulations
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Education and public awareness programs are considered very important to wetlands-related issues in the Guam Coastal Management Program (GCMP; programs include a bimonthly newsletter, posters, fliers, an activity book and a monthly television show)
3. State Management of Entire Coast As one unit or are there county programs or sub-components?	• Guam Bureau of Planning is the lead agency for the GCMP • Federally held estuarine and coastal property such as that belonging to the military is not part of the coastal management program • Territory Land-Use Commission has final permitting authority on all activities in tidal wetlands; however, any agency

GUAM (TERRITORY)	
Objective	**Comments**
	networked into the Guam Coastal Management Commission can review and make recommendations on the permit (Thus, increasing the length of the process to obtain a permit)

4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• There is one marine protected area created by U.S. Airforce to protect marine life on a reef near Air Force property
	  • Coastal management program helped establish the area
	  • Department of Agriculture co-manages the area
	• Territorial Seashore Protection Act is a Special Area Management Plan where additional reviews and slightly higher development standards are imposed
	• Recreational Water-Use Master Plan is SAMP-like

5. Case Studies and Other Lessons Learned	• Guam's education and outreach programs:
	  • GCMP has a consistent program of public education
	  • Result: continued success of wetland protection laws passes and large public outcry against policies harmful to wetlands
	  • Public library maintained by Guam Bureau of Planning with environmental, social and political publications

HAWAII	
Objective	**Comments**
A. Background	• About half of land area and development is within 5 miles of shore • Major industry is tourism
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Entire lands surface of state plus the territorial sea • Federal lands not included in the coastal zone
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	

1. Conflict Resolution, Coordination or Harmonization Processes
• Between adjacent regions agencies
• Between public stakeholders
• Coordination with
	• Hawan Coastal Zone Management Program (HCZMP) networked 58 laws and county ordinances
	• The emphasis was to avoid the development of new programs and to insure the effective immplemtation of authorities existing before the Hawan Coast Zone Act
	• Hawan Department of Planning and Economic Development , Office of State Planning is the lead agency
	  • Responsible for coordination, provides support to and administrates the HCZMP (i.e. handles funding, encourages public participation)
	  • Performs federal consistency determinations required for all USACOE Clean Water Act Section 404 permits
	  • Monitors state agency actions for state consistency

HAWAII	
Objective	**Comments**
adjacent states • Information sharing • Any large-scale regional accords?	• Department of Health regulates permissible uses of State wetlands; is involved with 404 permits and 401 certifications for consistency with state water quality standards which is important when considering wetland degradation and protection • Department of Environmental Quality: coordinates and directs programs with state agencies dealing with environmental quality and public education; it also reports on environmental conditions • Course of Action Provision authorizes civil suits against the state and county agency for alleged non-compliance with objectives and policies and failure to perform duties of the HCZMA in the county Special Management Area (SMA) and area between the shoreline and 3 mile limit; the Governor must ensure compliance outside the SMA • Wetlands inventory and mapping is considered highly important; wetlands data layer included in State GIS system; National Wetland Inventory entered into the State GIS system; county departments make SMA maps available • Pre-application meetings are sometimes used to facilitate coordination (There is a concern because of a lack of coordination between state and county officials and, also, because of lack of consultation among state agencies when issuing permits)
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Statewide Advisory Committee allows public participation and increases awareness in the HCZMP and membership in the committee includes interest groups and state and federal members • Although considered of low importance for protection, Department of Fish and Wildlife and USFWS (and University of Hawaii representatives) have monthly meetings to discuss technical issues
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• There are 4 counties (Kauai, Maui, Hawaii, and the City/ County of Honolulu) that are responsible for wetlands regulations; each regulates a Special Management Area; management authority important in HCZMP; each county has a master plan, community development plan, and comprehensive zoning; counties review permit applications and issue permits but do not regulate Conservation Districts; the SMA review includes an environmental review by Sate and/or county permitters • Designation of SMA is up to county although the state does set minimum requirements; changes to SMAs requiring the removal of land area are subject to state review • Hawaii Department of Land and Natural Resources (HDLNR) manages state-owned lands, has permitting authority and regulates Conservation Districts and state lands, including submerged ocean lands; manages fish and wildlife programs, threatened and endangered species and open space; land management and acquisition; involved with water management activities (e.g. issues streambed alternation permits); management or administrative agreements may be made with state or federal agencies for any area; maintains large wetlands in conservation districts
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated	• Special Area Management Plans are used (e.g. Kaneohe Bay master plan; Kawainui Marsh Resources Management Plan; West Hawaii Regional Plan; Pearl Harbor) • 9 Marine Life Conservation Districts protect bays, reefs and estuaries • There are 21 reserves under the Natural Area Reserve System • 11 state wildlife sanctuaries and 2 wetland wildlife sanctuaries and Waimanu National Estuarine Research Reserve

HAWAII	
Objective	**Comments**
are they?	(NERR) • HDLNR manages these areas • USFWS manages 5 National Wildlife Refuges
5. Case Studies and Other Lessons Learned	N/A

LOUISIANA	
Objective	**Comments**
A. Background	• Economy consists of commercial and industrial development (residential, seafood processing, harbours and marinas, shipbuilding and repair, motels and restaurants, marsh management, oil and gas processing) • Majority of shoreline is marshland
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Includes a all or parts of 19 coastal Parishes, all estuaries and tidal wetlands, several large lakes, and the territorial see (i.e. from shore to 3 miles) • Inland boundary roughly conforms to the 5 foot contour but follows various highways and parish or state boundaries
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large-scale, regional accords?	• Geologic Review Process (GRP) helps to minimize impact to wetlands from permitted oil and gas activities; applicant meets with many different agencies, and can discuss issues relating to the engineering, geology, and economic impact of a project proposal; New Orleans District Army Corps of Engineers is part of the GRP for Clean Water Act Section 404 permit reviews • Coastal Management Division (CMD): Consistency Section- evaluates federal agencies and deep port authorities activities (through the Coastal Use Permit program) to determine their consistency with the Louisiana Coastal Resources Program; Also comments on activities relating to federal land and waters • Department of Wildlife and Fisheries comments on Coastal Use Permit applications and CMD consistency reviews • CMD: Enforcement Section investigates violations and permit noncompliance; Technical Services Section and Field Investigations Section maintained and information base, performed research, monitoring • CMD has joint public notice programs with New Orleans District Corps of Engineers for and state Department of Environmental Quality, also with DEQ for 401 Water Quality Certifications • Information: National Wetlands Inventory has been digitized; GIS used to update wetlands and land-use maps and assists the permit process by maintaining a general outlook of activities and data • Calcasieu Estuary Environmental Task Force was an advisory panel on pollution in the estuary

LOUISIANA	
Objective	**Comments**
	• Coastal Management Division uses Memoranda of Agreement to coordinate activities with state and federal agencies
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Lake Pontchartrain Basin Foundation worked with 65 federal, state, local agencies and special interest groups in order to develop and implement a 20 year management plan • An Interagency Working Group and the public reviewed the Comprehensive Management Plan before it was finalized • Public comments are important for the Coastal Use Permit decision process; the public education campaign includes a television program and wetlands restoration classroom video
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Local parishes develop coastal management programs which are approved at state and federal levels; state has authority over states without approved programs; state always regulates "uses of state concern" • Coastal Management Division (CMD; in the Office of Coastal Restoration and Management, Department of Natural Resources) is the lead agency that regulates uses of state concern and provides oversight and technical assistance to local coastal management programs; with the exception of federally- or deep port commissions-regulated projects, CMD regulates all coastal uses
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plans are used (e.g. Marsh Island and Louisiana Offshore Oil Port complex) • Department of Wildlife and Fisheries manages state wildlife refuges
5. Case Studies and Other Lessons Learned	N/A

MAINE	
Objective	**Comments**
A. Background	• The southwest coast is fairly well-developed while Downeast area is remote and heavily forested with some farmland • Sport and commercial fishing, experiences recreational use pressure, industrial growth and development
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Defined by the inland boundary of 147 township; all coastal towns on tidewater, coastal islands and the sea to the end of state's boundary
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	

MAINE	
Objective	**Comments**
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• When instituted the Maine's CZM program main goal was to ensure local governments and efforts would primarily perform Coastal Zone Management programs • Information: there is a Maine Wetlands Inventory; State GIS is under development; Department of Environmental Protection (DEP) has permitting databases • State Planning Office determines state and federal consistency • State Planning Office (SPO) administers and supervises the CZM program, using technical advice from the Land & Water Resources Council (which has commissioners from various state agencies); SPO also distributes federal funding • Land & Water Resources Council helps coordinate issues from various state agencies with SPO as council chair • SPO has a program that integrates local and regional efforts to control development and population pressure • Federal Coastal Zone Management Zone funding was used to create "Coastal Coordinators" in Regional Planning Councils and a Shoreline Zoning Coordinator at DEP to provide technical assistance for shoreline zoning to communities • Technical assistance is also provided through the Shore Stewards partnership
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Coast Week is a big publicity event; involves annual beach clean-ups and education programs
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• State guidelines govern municipalities that have local permit process for tidal and non-tidal wetlands • DEP administers water zoning; state supervises local land use planning • Maine Coast Heritage Trust, local land trusts and U.S. Fisheries and Wildlife Service (USFWS) are involved in wetland acquisition • Committee on Coastal Development and Conservation increases public participation in the Coastal Zone Management process • Department of Environmental Protection receives about half of federal Coastal Zone Management grant money; administers Maine's natural resource policies • The state manages all tidal wetlands, including submerged lands, regardless of size
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Shoreland areas are included in Areas of Environmental Concern • This program is considered a moderately important environmental protection tool
5. Case Studies and Other	N/A

MAINE	
Objective	Comments
Lessons Learned	

MARYLAND	
Objective	**Comments**
A. Background	• Made up of two ecosystems: Atlantic coast and Chesapeake Bay (the largest and most productive estuary in the United states) • Major industries include recreational use, agriculture, forestry, commercial shell fishing and seafood processing • 36% of the state's Gross State Product is produced in the coastal zone

b. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Coastal zone is from the 3 mile territorial sea boundary to the inland boundary counties bordering the Atlantic Ocean, the Chesapeake Bay and Potomac River up to the District of Columbia
	• Coastal zone is two tiered
	  • Tier 1: Area of Focus, usually approximates the 100 year flood plain boardering tidals waters, but regions with high suburban areas and little flood plain may have a wider "Areas of Focus" for additional protection
	  • Tier 2: the rest of the zone

C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Tier 1 identification involves the cooperation of local governments, facilitating a Coastal Zone Unit awareness of project inconsistency with the Maryland Coastal Zone Management Program (MCZMP) • Digital mapping is used for tracking, National Wetlands Inventory is being updated; monitors wetland change; there are a state GIS and permit databases; project review involves the use of statewide database • A federal action must be consistent with MCZMP polices and programs whenever a state permit is not required • Applications for projects relating to tidal and non-tidal areas require joint application with U.S. Army Corps of Engineers (USACOE) • Department of the Environment reviews all USACOE applications • There are interagency meetings on delineation, permit oversight and training • Departments of Natural Resources, Transportation, Agriculture, Environment, Housing & Community Development and county local jurisdictions use Memoranda of Understanding to ensure state-level consistency with the MCZMP • Department of the Environment responsible for compliance monitoring and enforcement during and after a project (considered very important)
2. Partnering Arrangements (State Private Sector) to Achieve Goals of Program?	• Education and awareness programs are considered highly important for the success of the coastal zone management program. This includes wetlands education and training courses, publications and public participation • An Executive Order and Memoranda of Understanding networked interested and affected agencies and planning groups to facilitate management and decision making • Coastal and Watershed Resources Advisory Committee advises the state on important coastal issues; consists of roughly 100 members, including private citizens and representatives from business groups, civic and environmental organizations, academic institutions and government; made of 4 subcommittees (Environmental, Legislative, Policy and

MARYLAND	
Objective	**Comments**
	anding, Administrative) • Non-structural Erosion Control Program, run by the Department of Forestry, provides 50-50 matching grant for property owners to share the cost of designing and implementing non-structural erosion control projects; these types of projects are more popular than traditional structural methods
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Department of Natural Resources is the lead agency for the coastal zone management program • State has jurisdiction over all activities below mean high water line • Department of the Environment regulates non-tidal wetlands • Coastal zone program review process evaluates the impact on coastal resources of large activities on a case-by-case basis • Potential activities in Tier 1 are reviewed for on-site and off-site impacts before state agencies make a permit decision; the Tier 2 focus is on major facilities • Critical Areas Commission supervises and provides input to local governments regarding Areas of Critical State Concern; it can question the compliance of a local action to the coastal management program; local governments must establish management plans for a critical area and notify the Commission of actions taken in that area • Non-tidal wetlands not regulated as strictly as tidal wetlands; however, management is mainly through the state's federal consistency review and USACOE permitting • Land can be zoned as Intensely Developed, Limited Developed or Resource Conservation by local governments
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plans are used • Vegetated tidal wetlands are considered to be a standard type of Geographical Areas of Particular Concern • The Wetlands Permit Section of the Water Resources Administration manages GAPCs; specific areas with inherent natural value are recommended to local governments for preservation
5. Case Studies and Other Lessons Learned	N/A

MASSACHUSETTS	
Objective	**Comments**
A. Background	• 53% of the states economy is generated in the coastal zone • 70% of new development is in the coastal zone • Tourism and recreation are important to the economy • Strong maritime-oriented economy
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• From New Hampshire to Rhode Islands state boundaries and 3 miles seaward, and 100 feet landward of specified major roads, railways, or other visible right of ways • Also included are coastal wetlands and rivers with saline impact past the 100 foot general roadway boundary • Anadromous fish breeding routes to freshwater locations are included in the coastal zone
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Wetlands Conservancy Program maps wetlands in the state; an eelgrass Mapping Inventory, a local natural resources inventory exists for Areas of Critical Environmental Concern; statewide GIS base map; Wetlands permitting database is coming on line • State and U.S. Army Corps of Engineers (USACOE) collaborate for compliance monitoring and enforcement; Department of Environmental Protection examines some projects that have been permitted locally, mitigation projects are usually monitored for more than one year • Federal consistency determinations are made by the Coastal Zone Management Office which acts as a policy planning group, helps with funding and provides technical assistance • Memoranda of Agreement networked various agencies and programs to create the Massachusetts Coastal Zone Management (CZM) program • Joint Processing Committee involves meeting between Regional USACOE and CZM program representatives • CZM program representatives provide technical aid to Conservation Councils in meetings • CZM program gives grants to towns for wetland acquisition
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Coast Week Programs raise education and awareness; the wetland protection program publishes educational books; the Wetlands Banking and Restoration Program uses a grass roots approach; CZM program publishes a newsletter • See Conservation Councils in Section C3
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Department of Environmental Management is the state regulatory agency, supervises these activities and administrates the CZM program • Local volunteer Conservation Councils are responsible for permitting (permit is technically a state permit) , subject to review by DEP, their jurisdiction includes proposed activities within 100 feet of a Wetlands Resource Area; if they determine that an activity will negatively impact a resources, then the permit will have mandatory protective conditions;

MASSACHUSETTS	
Objective	**Comments**

	members are nominated by local governments to allow local politics to play a role
	• Conservation Councils involve about 2200 volunteers in 350 cities and towns
	• Though most planning is at the local level, Coastal Zone Management Office provides technical assistance for plan development
	  • Natural resource-use inventories are important to the plan (which should include human uses and applicable guidelines and authorities)
	  • Municipality is responsible for approving a development once the plan is enacted

4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Most of the coastal waters are designated as Ocean Sanctuaries to limit activities • 13 Areas of Critical Environmental Concern involve coordination among many municipalities to create a plan which is then approved by the state; subject to higher standard during permit review process; private property can be included in the ACEC; secondary and cumulative impacts are considered important in decision making • ACEC program is has resulted in local governments closely monitoring development in these area
5. Case Studies and Other Lessons Learned	N/A

MICHIGAN	
Objective	**Comments**
A. Background	• Longest freshwater coastline in the United States • Coastal gross product is approximately 23% of the state's gross product • Industrial ports transport 200 million tons of industrial and agricultural products
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• All waters and submerged lands of Michigan's Great Lakes up to the borders of Ontario (Canada), Ohio, Illinois, Indiana, and Wisconsin • Coastal area generally ranges inland up to 1000 feet from the ordinary high water mark, sometimes less and sometimes more (e.g. at river mouths, large wetlands or other special environmental areas)
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes	• Several state statutes were re-codified into the Natural Resources and Environmental Protection Act (1994) to improve wetlands protection, reduce government agency coordination, increase public participation and improve regulation comprehension

MICHIGAN	
Objective	**Comments**
• Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• National Wetlands Inventory is complete for the coast and is being digitized; GIS and databases useful for tracking and processing permits; Great Lakes Information System emphasizes environmentally sensitive data; database record keeping for losses and gains in environmental areas • Memoranda of Agreement aid in interagency coordination, e.g. with the Detroit District of the USACOE allows for joint state/federal public notices • USACOE and state permit staff undergo occasional joint training and information meetings • Natural Resources Commission determines consistency of federal activities to the coastal management plan
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Educational and awareness programs are considered highly important to the CZM program; references for law enforcement and persecutors, and school material have been made available • Natural Resources Commission provides funds and technical assistance to help local governments develop partnership programs
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Department of Natural Resources (DNR) is the lead agency for the coastal management program; responsible for the regulation of coastal wetlands; with in DNR: Land and Water Management Division administers the permit program and related statutes and regulations of the coastal zone program • Natural Resources Commission consisting of 7 Governor-appointed officials, created policy guidelines for the Department of Natural Resources • State is responsible for the administration of the federal Clean Water Act Section 404 permit program, except for areas that are considered traditionally navigable waters • Some counties, townships, villages and cities have land use planning and zoning requirements protecting wetlands but there are no state requirements; most land use decisions are local
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• CZM program designates and regulates approximately 275 miles of the coastline areas for specific habitat or environment concerns (Environmental Areas) • Special Area Management Plans are not used
5. Case Studies and Other Lessons Learned	• CZM funding goes to local government for the construction of low cost construction projects (e.g. boardwalks and stairs) allowing access to shorelines • Highly successful at protecting the intermediate areas from impact • Because of this success, all coastal states with projects enhancing public access for resource protection may use CZM

MICHIGAN	
Objective	**Comments**
	funding

MISSISSIPPI	
Objective	**Comments**
A. Background	• Major industries include recreational fishing, commercial fishing, manufacturing, coal burning power plants, oil refining, offshore oil an gas production and related onshore services, dockside gaming
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Coastal zone is set within three coastal counties: Hancock, Harrison, and Jackson
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Maps are used to prepare charts for Wetland Use Plan maps, to identify state-owned areas; to identify potential site for Coastal Preserve acquisition; National Wetland Inventory is used to identify freshwater wetlands; photography used to monitor wetland change; have socioeconomic database; have tidal wetlands permitting database for administration purposes • Department of Marine Resources (DMR) and Marine Resources Advisory Committee review a permit application before Mississippi Commission on Wildlife, Fisheries and Parks make a decision • Department of Marine Resources reviews for federal consistency after the involved state agency makes a comment; a state consistency review is done only if DMR receives a proposal; State Gaming Commission site approvals are not reviewed for state consistency; DMR can comment on leasing decisions of public trust tidelands to make sure it is consistent with coastal wetlands use plan • Department of Marine Resources is responsible for determining consistency; DMR can object to upland permits with indirect impact on coastal wetland areas • Pre-application permit coordinate proposed projects
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Donations from the Nature Conservancy and the US Fisheries and Wildlife Service started the Coastal Preserve system; DMR involved with planning wetland acquisition • Education and awareness campaign to promote wetlands protection include television advertisements, newsletters and publications
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• The sate does not mange freshwater wetlands, except with USACOE permitting • Mississippi Coastal program (MCP) emphasizes balanced development with environmental protection • Department of Marine Resources is the lead agency • Enforcement of coastal program goal is by Department of Marine Resources, Dept of Archives and History, Dept. of Environmental Quality (Office of Pollution Control and Office of Land and Water Resources) • Department of Marine Resources coordinates coastal program policies • Mississippi Commission on Wildlife, Fisheries and Parks is the lead policy agency for the coastal program • Marine Advisory Committee made recommendations on wetland permitting decisions

MISSISSIPPI	
Objective	**Comments**
	• DMR approves urban waterfront plans; all cities have local protective zoning; however, DMR gives technical assistance and guidance to local governments but does not do a formal state review of local plans
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Management Area Plans used to keep development away from critical areas; these are voluntary and require agreement of local government; the state reviews final plans; final plans are approved by Mississippi Commission on Wildlife, Fisheries and Parks; plans should be reviewed by DMR every two years for amendments
5. Case Studies and Other Lessons Learned	• Wetlands Use Plan protects wetlands through zoning for allowable uses (i.e. for industrial development, general use, commercial fisheries and recreational fisheries, preservation and special use) • Provides guidance regarding where and how development should occur to increase wetlands protection • Wetland maps produced from this plan are extremely important for reducing wetlands loss

NEW HAMPSHIRE	
Objective	**Comments**
A. Background	• 31.5% of state population is in the coastal zone • Only Portsmouth is appropriate for ocean-going commerce • Great Bay estuary and its tributaries are primarily undeveloped, except for the three historic waterfront communities at Exeter, Newmarket and Dover • Social uses include recreational uses and commercial shellfishing

B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Three parts to the coastal zone: 1) Atlantic seacoast, 2) Portsmouth Harbor and lower Piscatawa River (make up Ocean and Harbor Segment of the coastal program) and 3) Great Bay Estuary and associated tidal rivers (make up Great Bay segment)
	• Coastal zone includes all tidal waters to 3 mile territorial limit
	• Landward the coastal zone is two tiered
	  • Tier 1 is a zone of primary influence
	  • Atlantic coast, lower Piscataqua River and most of Great Bay estuary
	  • Boundary is whichever is greater of 1000 feet inland from mean high water mark or 1000 feet from the highest observable tide
	  • For Great Bay, the boundary is at identifiable features such as roads or railways, which are usually greater than

NEW HAMPSHIRE	
Objective	**Comments**
	1000 feet from the sea • Tier 2 is a zone of secondary or indirect influence • Upper Piscataqua River, tidal reaches of seven river draining into the Great Bay, and adjacent land to 100 feet inland of the highest observable tide
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Council on Resources and Development involved in conflict resolution between agencies • New Hampshire State Programmatic General Permit issued by the USACOE significantly increased the efficiency of wetland process for applicants; only one permit application to the state required • Inventory and mapping is considered highly important for protection of wetlands; National Wetlands Inventory completed. GIS used; local planning uses mapping; Database exists for review of permitting applications; see data at http://nhresnet.sr.unh.edu • North Eastern States have an interstate group that meets 4 times per year; there are also intra-state meetings • North Eastern states are working on a new North Eastern-wide functional assessment process • Wetlands Bureau has a strong enforcement authority, including administrative, civil and criminal penalties up to $10 000 per day • Appeals to Wetland Board permit decision can be made through the Appeals Council; higher appeals to Superior and Supreme Courts • Federal and state consistency determinations are covered in the permitting process, overseen by the Office of State Planning
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Education and awareness programs include annual workshops and Coast Week celebration
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Office of State Planning is the lead agency of the coastal program; coordinates the efforts of many state agencies and distributed funds; staffs the Council on Resources and Development • Department of Environmental Services Wetlands Bureau handles permitting decisions; requires local permits before state permits are issued • Local participation in the coastal program is voluntary, however, the Office of State Planning does provide funding and technical assistance. Local Planning Boards develop master plans which then can be voted into ordinances which can be enforces by law after public notices and meetings. Conservation Commissions in each town can comment on or intervene

NEW HAMPSHIRE	
Objective	**Comments**
	with the state permitting process in its own area • Cases with statewide significance are decided by State agencies while local authorities decide all other cases
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• 3 Harbour Management Plans are used to but provide little estuary and wetland protection • Special Area Management Plans are not used
5. Case Studies and Other Lessons Learned	• Good protection from modifications to natural, vegetated shorelines bordering tidal wetlands and waters are accomplished by using Tidal Buffer Zones • Effective tool to deal with the problems associated with shoreline development and buffering requirements

NEW JERSEY	
Objective	**Comments**
A. Background	• Because of the state's proximity to metropolitan areas of New York and Philadelphia, industrial development and extensive road network on near the shore, New Jersey's coastal zone is subject to intense development pressure • Tourism is the largest industry in the coastal area • Other industries include pharmaceutical and petrochemical industries • Coastal and wetlands hazards include hurricanes and strong storms, flooding, sea level rise, erosion

B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Coastal zone has variable width:
	  • New York border to Raritan Bay: up to the first road or property line landward of the mean high water line
	  • Raritan Bay to Delaware Memorial Bridge, varies from 0.5 to 24 miles
	  • Delaware River to Trenton, the coastal zone is up to the first road, inclusive of all tidal wetlands
	  • Also included in the Hackensack Meadowlands District

C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent	• Information and research tools include a wetlands inventory that is more detailed than the National Wetlands Inventory, mapped mitigation sites, an excellent GIS system for wetlands with many data layers and a permit tracking database; data is available on compact disk for a low cost • Mitigation sites are routinely inspected; maximum administrative penalties of $10 000 per day

NEW JERSEY	
Objective	**Comments**

regions/agencies
• Between public/stakeholders
• Coordination with adjacent states
• Information sharing
• Any large-scale regional accords?
	• Education and awareness programs include an occasional publication and a children's colouring book
	• Pre-application meetings are used to discourage some projects
	• Memoranda of Understandings are used, e.g. for Hackensack Meadowlands Special Area Management Plan
	• Joint permitting often used to accommodate Clean Water Act Section 404/state permitting; resulted in streamlining permit process
	• Wetlands Acquisition
	  • The Green Acres program, though not used only for wetlands, is involved with land acquisition, and wetlands both inside and outside of the coastal zone are included; Natural Lands Trust (Division of Parks and Forestry) is involved with wetlands land acquisition with respect to their natural values and for biodiversity protection
	  • Litigation and oil spill settlement money is used for wetlands acquisition
	  • Coastal Blue Acres program purchases land subject to natural hazards (e.g. from storms) to remove them from the real estate market
	• New Jersey's Freshwater Wetland Protection Act regulates practically all activities in freshwater wetlands in the state, including the coastal zone; not formally added to the coastal zone management program but has reduced significant wetland loss

2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Information and research tools are important for wetlands protection and useful to consultants of developers to minimize wetlands impacts when designing projects (See Section C1)
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Coastal zone planning and administration of the coastal zone management program is done by the Office of Environmental Planning (in Department of Environmental Protection); New Jersey Coastal Management Program (NJCMP) policies in the entire coastal zone except for the Hackensack Meadowlands District and there is shared regulatory jurisdiction with Pinelands Area (See Section C4) • State Development sand Redevelopment Plan is the first statewide coastal zone planning program; NJCMP and State Planning Commission works with the coastal counties and municipalities to adopt rules consistent with this Plan • DEP and the Department of Energy are responsible for siting coastal energy facilities • DEP and State Police Bureau of Emergency Services manage coastal flood plains

4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Hackensack Meadowlands District is a Geographical Area of Particular concern
	• Special Area Management Plans are used; there are 48 areas with special management policies
	  • Hackensack SAMP planning group includes various agencies (USEPA, NOAA, USACOE, Meadowlands Development Commission (has zoning and planning authority), and DEP
	  • must be consistent with the NJCMP

NEW JERSEY	
Objective	**Comments**
	• Pinelands Area, regulated by Department of Environmental Protection and Pinelands Commission, where there is coastal overlap
5. Case Studies and Other Lessons Learned	• See GIS/Information systems in Section 1

NEW YORK	
Objective	**Comments**
A. Background	• Long Island, NYC, and Hudson River are marine tidal areas • Long Island, highly residentially and commercially developed; recreational use important • NYC is a major international port and is highly developed • Hudson River has power facilities, wineries and orchards • Great Lakes-St. Lawrence River region is generally rural, with recreational use important
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Coastal zone is defined differently for each coastal region • Great Lakes-St. Lawrence River: ~500 feet from shoreline in urban areas; 1000 feet in other areas less than 500 where roads or railways run parallel to the shore; major state owned lands, facilities or electric power plants bordering the shore are in the coastal zone • Barrier Islands of Long Island are in the coastal zone • NYC: ranges from 500 to 100 feet, except Staten Island and along major tributaries, coastal zone can extend several 1000 feet • Hudson River Valley: 1000 feet; scenic or recreational areas, up to 10 000 feet
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Since Local waterfront revitalization plans can delineate their own coastal zone boundary; the state coastal zone boundary may change with state acceptance of local plans • Mapping and inventory is considered highly important; maps are part of permit applications and review; Department of Environmental Conservation (DEC) has a tidelands wetlands inventory • Data base keeping track of permits and a GIS Database that evaluates tidal wetlands loss and gain • Department of State reviews for federal consistency • State consistency is determined by each agency proposing a project; consistency claim is then reviewed by Department of State; local municipalities determine consistency if project falls under the jurisdiction of Local Wetland Revitalization Plan • Department of State tracks major projects by using Environmental Impact Statements • USACOE and Department of Environmental Conservation are developing single permit process for underwater lands • Interagency coordination (e.g. Department of State, DEC) is used to determine significant coastal fish and wildlife habitats (Memoranda of Agreements exist) • Memoranda of Agreement also used for management of Hudson River Estuary and Oyster Bay Protection Area
2. Partnering Arrangements (State/Private Sector) to	• Public is involved with many programs (e.g. Special Area designations). Department of State educates public and state agencies

NEW YORK	
Objective	**Comments**
Achieve Goals of Program?	
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• The state (DEC) regulates tidal wetlands and the area within 300 feet of tidal wetlands, and freshwater wetlands greater than 12.4 acres, and 100 feet around those wetlands • The Coastal Management Program (CMP) is administered by NY Department of State, coordinates activities, and tracks environmental quality reviews affecting the coastal zone; performs federal consistency determinations • Regional plans (e.g. Long Island, NYC, Hudson River, Great Lakes-St. Lawrence River) are included in the state CMP and consider primarily public access, coastal hazards, cumulative and secondary impacts, and wetlands enhancements. In each region accepted, these would take the place of the state CMP; Department of State helps manage these regional plans; Status: NYC revising program, Long Island Regional Coastal Management Program is review process • Department of Environmental Conservation manages state-owned submerged land: and coastal water bodies; does not manage baylands • Department of State provides guidelines, money and technical assistance to local programs; reviews local programs for compliance with the New York CMP; counties can enforce county CMPs • Local Waterfront Revitalization Plans are used; Local Harbor Management Plans developed with financial and technical assistance from the Department of State; zone water to avoid conflicting uses • Local governments can conduct permitting administer the Coastal Management Program; otherwise the county and/or state will administer the program; once approved, local plans become part of CMP • Department of State reviews tidal permit applications but can only make recommendations; does not have veto power • DEC authorizes wetlands permits • There is no size limits for protection of specific wetlands if they are considered to be of unusual local importance • Land acquisition is done by DEC and Department of Parks and Recreation
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Management Areas include: State Parks, Local Waterfront Revitalization Areas, Estuarine Sanctuaries, Significant Fish and Wildlife Areas; designated scenic areas also protected • Agricultural and historical lands can be considered Geographical Areas of Particular Concern • Department of State designates these areas, based on DEC recommendations • Local government regulates each area
5. Case Studies and Other Lessons Learned	• Jamaica Bay • Maintenance dredging is timed to minimize impact to fish and wildlife

NORTH CAROLINA	
Objective	**Comments**
A. Background	• 11% of state population lives in the coastal zone • Coastal zone is the fastest growing region in the state • Economy is driven by forestry, agriculture, tourism, fishing and recreational use
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Coastal zone is bounded by the landward boundary of all coastal counties and seaward to the extent of state jurisdiction • Coastal properties all have less than 40 feet elevation and show effects of saltwater • It is a political boundary that follows ecological principles
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Coastal Future Committee (1994) was created to review coastal management agencies and the Coastal Area Management Act (CAMA) • Functional assessments using a GIS system is important for use in local land use plans and for Clean Water Act Section 404 consistency review procedures; wetlands permit and loss tracking databases used • Compliance monitoring and enforcement done by Division of Coastal Management (DCM) • DCM coordinates forums meeting between state agencies before review of major project permits • Memoranda of Agreement exist between many state agencies • Joint state-federal permit applications used as coordination tools and are considered highly important for wetlands protection • Coastal Resource Commission (which is supported by DCM) reviews programs for consistency with state programs and goals (e.g. USACOE Section 10, 404 permits and Coast Guard permits); state agencies must conform to local land use plans and CAMA while federal agencies must conform to local land use plans and state policies • DEC reviews local plans to make certain that they are consistent with CAMA • Division of Coastal Management provides technical assistance to CRC and brings concerns to CRC
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Albemarle Pamlico Estuarine Study's goal is to bring together user groups, state agencies, and interested parties to determine a comprehensive estuary management conservation plan (the program is similar to a Special Area Management Plan) • DCM, NC Wildlife Resources, Natural Heritage Program and Marine Fisheries are involved in public awareness and education campaigns
3. State Management of Entire Coast • As one unit or are there county programs or sub-	• Division of Coastal Management manages tidal and estuarine areas; has jurisdiction over all public trust lands below mean high water line; administers the Coastal Area management Act • DCM involved with land acquisition • Coastal Resources Commission (CRC) is a citizen-based, quasi-judicial body, handling permit appeals and makes overall

NORTH CAROLINA	
Objective	**Comments**
components?)	policy decisions; statewide standards mandatory for county and municipal (i.e., local) land use plans and related are determined by CRC; plans are updated every five years; state responsible for management of the most sensitive areas: the CRC delineated Areas of Environmental Concern which must be considered in local plans • Coastal Resources Advisory Council allows for formal input to CRC from local governments and resource agencies • Small tidal projects and minor permits are issued by local governments; the state handles permitting of larger projects
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Areas of Environmental Concern (AEC) provide habitat protection • Types of AECs: estuarine waters; estuarine shoreline; coastal wetlands; public trust waters, ocean hazard areas • CRC has not allowed a development project in 8 years on an AEC even though it can, provided that they meet certain requirements
5. Case Studies and Other Lessons Learned	• GIS is considered highly important for wetlands management, especially with the increasing trend to use a watershed approach • NC Coastal Region Evaluation of Wetland Significance GIS system used for functional assessment, 404 consistency review, important for state restoration bill Used many data layers (e.g. soils, fish nursery areas, point source discharge pollutes, protected lands, etc.)

COMMONWEALTH OF NORTHERN MARIANA ISLANDS (TERRITORY)	
Objective	**Comments**
A. Background	• Volcanic islands, with limestone reef deposits, are very rugged and have steep topography • Impacted by typhoons • Tourism industry is the main source of development pressure; agriculture is small-scale; commercial and recreational fishing also done; 5 power plants; strong U.S. Military presence
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• All land and water areas are in the coastal zone; no point on land is further than 2.5 miles from the sea • Two tiered management process: • Tier 1: defined by boundaries of 4 Areas of Particular concern (Shoreline, form mean high water mark to 150 feet inland; Lagoon and Reef, mean high water mark to outer slope of fringing reef; Wetlands and Mangrove, mangrove and all other areas; Port Industrial, land and water areas around to ports) • Tier 2: the rest of the Commonwealth
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	

COMMONWEALTH OF NORTHERN MARIANA ISLANDS (TERRITORY)	
Objective	**Comments**
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Violations are not common; fines can be up to $10 000 per day; good awareness of regulations • Inventory and mapping is considered highly important for coastal management and protection; wetland areas are identified by maps of Wetlands and Shoreline APCs and are important to determine development project impacts; U.S. Army Corps of Engineers (USACOE) and U.S. Fisheries and Wildlife Service (USFWS) conduct mapping; GIS is used by Coastal Resource Management Office and Division of Public Lands • Permit reviews include interagency coordination meetings • Memoranda of Agreements exist among various agencies to facilitate coordination • Coastal Advisory Committee recommends changes to Coastal Resources Management Plan, involved in conflict resolution; gives advice relating to permitting • Planning and Budget Affairs distributes federal grants and contracts
2. Partnering Arrangements (Territory/Private Sector) to Achieve Goals of Program?	• Many territory agencies are involved in educational awareness campaigns; Coastal Resource Management Office headed an large campaign in 1990-92 that involved posters, newsletters, and permit procedure government staff training workshop
3. Territory Management of Entire Coast • As one unit or are there county programs or sub-components?	• All activities in Tier 1 are under the permit process; Tier 2 requires permits if activities have an impact to coastal water or if the project is considered a major siting • Coastal Resources Management Office (CRMO; within Planning and Budget Affairs) is the lead agency and administers all Coastal Resource Management Plan (CRMP) programs; gives out permits for physical development with particular concern to Area of Particular Concern; coordinated activities among territory agencies • Joint federal Commonwealth of Northern Mariana Islands has investigated development of wetlands mitigation banks, streamlining the permit process, addressed wetland management, helped coordinate of federal permits processing and the application review procedure • *Mariana's Public Land Corporation* leases land (for development, agriculture and grazing) • Division of Environmental Quality: regulates, monitors and enforces water quality requirements; responsible for pollution control, sewage disposal and earth moving permits, is the lead agency for any project that having potentially significant impact on coastal water and delegates responsibility for the permitting decision; CRMO is responsible for permitting projects not in Areas of Particular Concern (APCs; unless exempted) • Department of Natural Resources manages submerged lands and tidelands; these must be consistent with the CRMP • Division of Fish and Wildlife conducts research and makes recommendations on permit process and protection of land and water species

COMMONWEALTH OF NORTHERN MARIANA ISLANDS (TERRITORY)	
Objective	**Comments**

4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plans (SAMPs) are used: APCs are considered like a SAMP; Saipan Lagoon Management Plan regulated jet ski zone and numbers in the lagoon; Saipan dump is SAMP-like
	• Wetland and Shoreline APCs try to avoid, minimize and mitigate impacts
	  • Impacts on drainage patterns, habitat destruction, toxic substance discharge and water quality, and flow degradation are regulated
	  • Regulations apply when APCs are mapped (includes most freshwater wetlands)
	  • CRMO manages request for changes to or designations of APC
	  • This is the major planning process affecting wetlands
	  • Areas within APCs have large degree of protection

5. Case Studies and Other Lessons Learned	• Mariana's Public Land Corporation had Public Land Exchange Act Program (now discontinued)
	  • Exchanged undevelopable private land with public uplands
	  • Highly effective at wetland protection; however, there was some environmental disbenefit associated because some land was leased to Division of Public Lands for grazing and pig farming

OREGON	
Objective	**Comments**
A. Background	• Fairly straight shoreline, mountainous interior with development focussed around estuaries, or marine terraces and dunes along the coast • Economy is based on forestry, fishing and farming, tourism and the retirement sector
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Coastal zone includes all land area west of the crest of Oregon Coast Range, the watersheds of all coastal rivers (except for the Columbia River, Umpqua River, and Rogue River)
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders	• Decisions of private parties, local government, state agencies and federal agencies must agree with Local Comprehensive Plans • Threat of administrative, civil penalties of up to $10 000 per day and criminal misdemeanor penalties are effective compliance processes • Division of State Lands (DSL) has a joint permit application requirement with the U.S. Army Corps of Engineers (USACOE) which facilitates coordination • Federal-State pre-application conferences are conducted including all agencies and consultants (some at state level only

OREGON	
Objective	**Comments**
• Coordination with adjacent states • Information sharing • Any large-scale regional accords?	and may include field visits) • Local governments must submit land use notification to DSL when proposed activity may impact wetlands mapped on National or Local Wetland Inventory; response is required within 30 days • GIS system has good data only for estuarine and tidal habitat and zoning; DSL has a system of three linked databases (permits, mitigation and enforcement); however, data collection is inadequate • A high degree of protection for tidal wetlands has been afforded by the use of local land and water use plans for each of Oregon's 17 Estuaries; proposed projects must be consistent with uses allowed in local estuary zones or they are not permitted by DSL (state consistency rules) or USACOE (federal consistency)
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Division of State Lands is involved in education and awareness campaigns (e.g. wetland newsletter, training for coastal planners)
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Department of Land Conservation and Development performs state and federal consistency reviews; is the lead agency • Division of State Lands manages most of the tidelands and all submerged lands in estuaries • USFWS manage extensive tidal brackish and freshwater wetlands in the Columbia River • Oregon Parks and Recreation (or local parks) manage many coastal lakes and associated wetlands for recreation • Land Conservation and Development Commission develop mandatory Local Comprehensive Plans; Department of State Lands usually regulates alteration to wetlands while local plans regulate uses of wetlands
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• CZM funds were used to purchase lands for South Slough National Estuarine Research Reserve • The development of local land use plans is similar to a Special Area Management Plan process

5. Case Studies and Other Lessons Learned	• Estuarine-Shoreland Planning program provided for integrated local shoreline-estuary planning
	• Involved active federal participation as well as local
	• Features of the program include:
	  • Overall and Individual Estuary Classification Systems involve estuarine classifications based on how much development is permissible; used in conjunction with a system of dividing individual estuaries into natural, conservation and development units to maintain diversity and shoreland zoning
	  • Regional Planning Approach multi-jurisdictional approach, promoted consensus, regional approaches to decision-making, bringing together different interests

OREGON	
Objective	**Comments**
	• Mitigation and Mitigation Banking • These planning policies have gained popular acceptance as management strategies in the United States and in other places; have helped develop the Special Area Management Plan concept used all over the world

PENNSYLVANIA	
Objective	**Comments**
A. Background	• Delaware Estuary Coastal Zone shoreline is highly developed; uses include industrial, commercial, transportation, manufacturing , and limited recreational use • Lake Erie Coastal Zone is less developed; a third of lakefront is the City of Erie; agricultural; recreation on Presque Isle State Park on Lake Erie

B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Has Atlantic and Great Lakes shorelines
	  • Atlantic: Delaware Estuary Coastal Zone; ranges from one eighth to 3.5 miles wide, depending on degree of urbanization and the extent of floodplains; tidal and freshwater wetlands and the Delaware River to the midstream boarder with New Jersey
	  • Great Lakes: Lake Erie Coastal Zone: Lake Erie shoreline, City of Erie and 9 other municipalities: north to the international boundary; inland from 900 ft in City of Erie to more than 3 miles in rural areas; includes floodplains of Lake Erie and tributaries

C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional	• National Wetland Inventory used; photos used to detect noncompliance; permits require detailed inventory and delineation; permit database used (but are not up to date); GIS ability is being developed • Regional Department of Environmental Protection (DEP) offices or local Conservation Districts approve general permits for minor projects • State permit review requires consistency with the Coastal Zone Management Program (CZMP) policies and objectives; state permit approval process requires federal consistency; good coordination exists with U.S. Army Corps of Engineers (USACOE) and federal agencies; regional DEP offices do Clean Water Act 401 Certifications, coordinated with consistency determinations • Improved coordination with local governments is a priority of the CZMP • State-federal coordination facilitated by the use of joint applications and notices • Coastal Zone Management Section (CZMS) within the DEP policy is involved with development and coordination; federal

PENNSYLVANIA	
Objective	**Comments**
accords?	consistency determinations; also, facilitates wetlands management by using CZM

2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Education and awareness campaigns include training government employees in wetland delineation
	• Three types of environmental coordination meeting are used
	  • Agency Coordination Meetings are used with Department of Transportation projects
	  • Urban Waterfront Action Group meeting are used for Delaware Estuary Coastal Zone projects
	  • Environmental Review Committee has meetings with applicants and agencies

3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• U.S. Fisheries and Wildlife Service (USFWS) manages part of the Delaware estuary's tidal marsh • State or local public bodies manage wetlands, which are mostly beaches, along Lake Erie shore for recreational use • Coastal Zone Management Section (CZMS) within the Department of Environmental Protection is the lead agency for the coastal zone management program • Bureau of Water Quality Protection (in DEP) is responsible for regulation of wetlands, tidal and non-tidal waters • Departments and bureaus within DEP have the key management responsibilities
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• GAPC's are included in selected wetlands under the Natural Values Category-or wetlands recommended by local groups • GAPC designation helps define where CZM-funded construction projects may be located • No particular protection provided by designation other that basic regulations • Not considered important for overall wetland protection

5. Case Studies and Other Lessons Learned	• Delaware Estuary Wetland Enforcement Initiative
	  • Memoranda of Agreement exist to facilitate the process
	  • Agencies involved: Bureau of Water Quality Protection; USACOE; EPA and USFWS
	  • Use annual flight and photo-interpretation, helicopter flight and site inspections to identify violations
	  • Several agencies may initiate enforcement; various agencies may divide follow-up responsibilities
	  • Shared state-federal enforcement responsibility has resulted in improved enforcement coordination among agencies
	  • When problems develop in one agency, responsibilities may be transferred to other agencies allowing them to keep up the pressure on violators to resolve the problem
	  • Violations may be fined, require site restorations, or after the fact permits and mitigation
	  • This program has resulted in increased compliance, community awareness and education relating to wetland conservation

COMMONWEALTH OF PUERTO RICO (TERRITORY)	
Objective	**Comments**
A. Background	• Consists of the islands of Puerto Rico, Culebara, Mona, Vieques and many smaller islands • There is a large United States naval base on eastern Puerto Rico • Major inputs to the economy include agriculture, construction to meet rapid urban growth, manufacturing and tourism
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• On the island of Puerto Rico, coastal zone extends 1 kilometer inland plus it includes "key natural systems of the coast" and seaward form the mean low water mark to 3 nautical leagues (the entire island may be included in the near future) • All other islands are with coastal zone
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• National Wetlands Inventory maps are being entered into GIS; will be use to evaluate cumulative impacts; Planning Board keeps Scientific Inventory of Natural, Cultural and Environmental Resources which are being incorporated into the Department of Natural Resources (DNR) GIS system • The need for compensatory mitigation is decided by DNR, U.S. Army Corps of Engineers (USACOE), and Environmental Quality Board (EQB) together • Compliance inspections and patrols of coastal areas are done by DNR Ranger Corps; Memoranda of Agreement exist between DNR, EQB and Regulation and Permits Administration • USACOE, U.S. Fisheries and Wildlife Service (USFWS) and other Federal Agencies have frequent interagency coordination meetings • DNR, EQB and Planning Board meet regularly for project review coordination meetings • Regulatory programs have had positive protection role for wetlands (e.g. small increase in mangrove areas) • Planning Board determines federal consistency • DNR and Planning Board Review applications for USACOE activities (CWA Section 401 and 404) • Regulatory and Permitting Board issues permits for Planning Board Regulations • Environmental Quality Board requires environmental impact assessments for government actions which affect the environment
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• DNR and EQB have a formal education program for schools and the public
3. State Management of Entire Coast • As one unit or are there county programs or sub-	• Department of Natural Resources is the lead administrative agency; manages submerged lands up to areas affected by wave action during storms; issues permits for activities on public land in maritime zone; DNR also must review other permits (e.g. DNR reviews Panning Board/USACOE fill activities of non-tidal wetlands) • Planning Board is responsible for overall policy making and development control; performs land use planning and zoning

COMMONWEALTH OF PUERTO RICO (TERRITORY)	
Objective	**Comments**
components?	for coastal municipalities and for general zoning; maps coastal zoning district and floodable areas; establishes buffers zones with input from DNR
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plans process provides management protection to mangrove areas; considered the most effective tool for protection of estuaries and coastal wetlands • All mangrove areas and seven other areas are designated as Special Planning Areas because they are considered important coastal resources that are subject to use conflicts; also designated as GAPC's • 19 areas (and 4 coastal forest sites) have been designated as Natural Reserves by the Planning Board • Planning Board and Governor approves management plans for Special Management Areas • DNR has created a generic management plan for mangrove areas which is being review by Planning Board; has a manual for mangrove restoration; prepares management plans for SPAs • DNR manages the Jobos Bay National Estuarine Research Reserve; CZM funds were used to purchase a major part of the area • Interagency committee (Planning Board, DNR and EQB) created a conservation management plan for Tortuuero Lagoon
5. Case Studies and Other Lessons Learned	N/A

RHODE ISLAND	
Objective	**Comments**
A. Background	• Most of the area is urban and suburban; very little rural • Population of one million, centered around Providence • Large increase in population from summer seasonal population • Major ports possessing large tanker and petroleum storage facilities are located at Providence and East Providence

B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• 3 tiered approach to the coastal zone
	  • Tier 1: tidal water to the 3 mile offshore limit and all shoreline features (e.g. coastal wetlands, dunes, bluffs, etc.) and 200 feet landward of the shoreline features
	  • Tier 2: bounded by and including 22 Coastal townships
	  • Tier 3: the entire state

C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution.	• The wetlands regulatory program involves exclusions based on a waters classification system involving six categories

RHODE ISLAND	
Objective	**Comments**
Coordination or Harmonization Processes • Between adjacent regions agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	(Conservation Areas, Low Intensity Use, High Intensity Boating, Multipurpose Waters, Commercial and Recreational Harbors, Industrial and Commercial Navigation Channels) • Mapping and Inventory programs are considered very important to protection of estuaries and coastal wetlands; these include: Inventory and mapping (NWI; various mapping efforts; aquatic habitat inventory at Narragansett Bay; Coastal Region Priority Use Map gives an overview of Coastal Resource Management Council guidelines) and GIS database, records (maps state wetlands, critical areas, land use, rare species, other natural areas) • A state permit issued instead of a federal consistency certification • Rhode Island has an effective compliance and enforcement program: a CRMC enforcement officer insures that permitted activities do not result in filling; violations can result in cease and desist orders; violations are being recorded on property deeds so banks will not give mortgages unless wetlands are restored • CRMC and DEM are jointly involved with wetlands identification for acquisition
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Education and awareness campaigns include a newsletter describing the Coastal Resources Management Program; Coast Week events • For a large project, the Coastal Resource Management Council (CRMC) and Department of Environmental Management (DEM) coordinates permit requirements through meetings with the developer and federal agencies (i.e. USACOE)
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Coastal Resource Management Council (CRMC) is the lead agency • CRMC has permitting jurisdiction over freshwater wetlands near the coast and adjacent to tidal wetlands; also, has permitting authority over projects that occur throughout the entire state (e.g. power generation plants, petroleum storage facilities, chemical petroleum facilities, etc) that may conflict with council management plans, proposals, activities or uses; significantly damage the coastal region environment; • CRMC reviews sewage treatment and disposal outside its direct area • CRMC responsible for budgetary affairs and communication with Office of Coastal Resources Management • Department of Environmental Management manages freshwater, non-tidal state wetlands (i.e. those not covered by CRMC; Memoranda of Agreement exist for this) • Harbor Management Plans are required for all coastal cities and towns
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Coastal Resource Management Council manages areas within and close to (if expected to have serious impact) SAMPs • US Fish and Wildlife Service manages Trustom Pond as a wildlife refuge • CRMC has some authority because of federal consistency requirements • Special Area management Plans are used and are considered highly important (e.g. Salt Pond Region and Narrow River Special Area Management Plans mange development around coastal ponds and a fjord-like estuary, respectively) • Salt Pond Plan Special Area Management Plan • Addresses issues of deteriorating water quality, sedimentation, over fishing, storm damage and user conflict

RHODE ISLAND	
Objective	**Comments**
	• Plan development included all levels of government, interest groups such as fishermen, environmentalists, developers • Thus, conflicts were resolved prior to the plan becoming public, so that when the draft did become public, it drew strong public support • non-regulatory initiatives are coordinated by the Action Committee; it sets priorities each year • The Coast Resources Management Plan includes Geographical areas of Particular Concern (but this is given low importance for wetland and estuary protection)
5. Case Studies and Other Lessons Learned	N/A

SOUTH CAROLINA	
Objective	**Comments**
A. Background	• 40% of coastal zone is park or wildlife preserve; 50% is developed; 10% is undeveloped • Coastal population is 900 000 but increases seasonally due to tourism
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Two tiered Coastal Zone • Seaward: coastal waters and submerged bottom to the territorial limit • Inland: defined by the area within eight coastal counties containing critical areas
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large scale regional accords?	• Compliance monitoring and enforcement includes the following • Mitigation project monitoring reports must be submitted by the permit applicant • Site inspections are periodically made by the Office of Coastal and Resource Management (OCRM), South Carolina Wildlife and Marine Resources Department, U.S. Army Corps of Marines (USACOE), and or U.S. Fisheries and Wildlife Service (USFWS) • Memoranda of Agreements with USACOE and U.S. Environmental Protection Agency (USEPA) enabling South Carolina Coastal Council and OCRM to be the lead persecutors of state violations and to impose criminal and civil penalties • USEPA and USACOE must conform to state regulations for any federal settlements • Federal agencies, state agencies and developers have monthly meetings to discuss projects; this is considered a highly important tool • OCRM coordinates with other state and federal agencies to develop a state policy on mitigation banking
2. Partnering	• Education and awareness programs include: a developer's handbook; Coast Week activities; presentations and

SOUTH CAROLINA	
Objective	**Comments**
Arrangements (State/Private Sector) to Achieve Goals of Program?	publications
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Office of Coastal Resources Management (OCRM) can review any project requiring a state permit, federal permit or licenses, or federal funding, direct federal activities (relates to consistency determinations) to determine if the project is consistent with the policies and procedures of the South Carolina Coastal management Program; has jurisdiction over all activities in the state's "critical areas" (i.e. beaches, beach dune systems, tidelands and coastal waters) • OCRM manages half a million acres of coastal marsh • 700, 000 acres of freshwater wetlands are manages by other state and federal agencies (e.g. USFWS, U.S. Forest Service, National park Service, South Carolina Marine Resources Department, etc…) • South Carolina Water Resources Commission and Budget Control Board responsible for regulating state permits for lands below mean high water line • Other non-tidal wetlands in the coastal zone are not regulated except though USACOE CWA Section 404 permits and Coastal Zone Consistency Certification (performed by OCRM)
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plans are used, involving local planning • Critical areas managed by OCRM are broadly defined as "areas with natural resources values, areas where activities depend on coastal waters, areas of cultural, archaeological or historical significance"
5. Case Studies and Other Lessons Learned	N A

U.S. VIRGIN ISLANDS (TERRITORY)	
Objective	**Comments**
A. Background	• Of the three main islands, St. John and St. Thomas are volcanic islands with steep topography; St. Croix is limestone-based from former coral reefs and has a less steep topography • Tourism is the main industry; also, oil refineries, commercial fishing and agriculture

B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• All islands, to limit of territorial sea, are in the coastal zone
	• Two tiered system:
	  • Tier 1: Immediate shorelines areas; biophysical and administrative features determine the inland extent
	  • Tier 2: all remaining inland area, mostly administrative

C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• The permitting process involves a mandatory pre-application meeting • Surprise inspections are allowed as a condition of construction permits; there are 16 enforcement officers, 8 on St. Croix and a combined total of 8 for St. Croix and St. Thomas • The state permit is considered the most important tool to regulate and protect wetlands • Inventory and mapping: salt ponds are identified in an inventory mapping project; GIS is being planned but has not yet been implemented; permit tracking is not digitized but enforcement officials are efficient at keeping track of permits
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• N A
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Department of Planning and Natural Resources is the lead agency for the Virgin Islands Coastal Zone Management Program (VIC ZMP) • The coastal zone permit process relate to new developments in Tier 1, projects require either major or minor permits • Coastal Zone Management Commission, 5 members, representatives from the three main islands, the Commissioner of Conservation and Cultural Affairs, Director of the Planning Office, responsible for authorization of major development

U.S. VIRGIN ISLANDS (TERRITORY)	
Objective	**Comments**
	permits • Commissioner of Conservation and Cultural Affairs authorize minor projects
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plan process is being investigated • Management plans are being developed for 18 established Areas of Particular Concern • Lagoon and mangrove areas are recommended for preservation by some of these plans
5. Case Studies and Other Lessons Learned	N A

VIRGINIA	
Objective	**Comments**
A. Background	• Atlantic coast barrier islands are mostly conservation areas and wildlife refuges with limited development • Coastal economy includes agriculture, forestry, shell fish and commercial fin-fish, tourism, recreation, and a military presence
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• The coastal zone is delineated by the inland boundary of 29 counties and 17 cities
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions agencies • Between public stakeholders • Coordination with adjacent states • Information sharing	• Inventory and mapping is considered a highly important tool; Virginia Institute of Marine Science (VIMS) keeps Tidal Marsh Inventories, Resource Protection Areas are mapped separately; National Wetland Inventory; VIMS has database for tidal wetlands permit reviews conducted by Marine Resources Commission (MRC) and VIMS; VIMS involved with GIS and digitizing inventories • Quantitatively assessing impact from the permit program is not possible with when only the number of permits issued (not areas) is being tracked; MRC tried to solve this problems by requesting for more information in applications for proposed developments; lack of mitigation data is also a problem for assessing the impact of the regulatory program • Compliance and enforcement: post-construction inspections on permitted projects are conducted by MRC; MRC and Local Wetlands Boards issue restoration orders and impose fines • CZM money used for direct and indirect wetland acquisition

VIRGINIA	
Objective	**Comments**
• Any large-scale regional accords ?	• Interagency coordination meeting are used in the permit process • Various Memoranda of Agreement exist to facilitate interagency coordination • Various state agency and local government representatives comprise the Coastal Committee whose duties involve reviews of funding requests and setting priorities for the Virginia Coastal Management Program (VRCMP) • VIMS performs environmental impact assessments of proposed projects in tideland wetlands for MRC and Local Wetlands Boards • Department of Environmental Quality (DEQ) is responsible for coordination of environmental reviews for state facilities and larger land acquisitions • DEQ makes federal consistency determinations • State consistency: DEQ monitors state activities with potential impact to the coastal zone; Secretary of Natural Resources mediates conflicts; state activities on state lands must be consistent with the VRCMP, although they do not need permits • 1989-Nontidal Wetlands Roundtable was created to assess non-tidal wetlands management issues
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Nature Conservancy funded, using Coastal Zone Management, for land acquisition • Education and awareness campaign includes: public hearings; MRC Wetlands Guides; Eastern Shore Birding Festival
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Department of Environmental Quality is the lead agency; responsible for consistency determinations • The state, through Marine Resources Commission (MRC) and Local Wetlands Boards (with MRC oversight) is responsible for authorizing permits to activities in tidal wetlands; MRC has authority where Wetland Board has no jurisdiction and reviews Local Wetland Board decisions • Local Wetlands Boards grant permits based on public comments, VIMS assessments and technical advice, an assessment of public and private advantages disadvantages • Federal programs such as USACOE Section 404 and Section 401 of the Clean Water Act permitted by the U.S. Army Corps of Engineers (USACOE) are used since Virginia has no state regulations for non-tidal freshwater wetlands; state can review projects under 404 permits • 1988- local governments created local Chesapeake Bay Preservation Area Plans for protection from non-point pollution; local governments designate Shoreline Resource Protection Areas to include tidal wetlands and connected by surface flow non-tidal wetlands
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal): How well integrated and coordinated	• Special Management Area Plans are considered highly important • Geographical Areas of Particular Concern (GAPCs) are considered of low importance to wetland and estuary protection; these include Natural Resource Areas, Natural Hazard Areas, Waterfront Development Areas • Tidal wetlands and associated non-tidal wetlands are included in designate Resource Protection Areas designated by local

VIRGINIA	
Objective	**Comments**
are they?	governments; only water-dependant impacts are usually allowed; Resource Management Areas surround RPAs and are supposed to act as buffer areas
5. Case Studies and Other Lessons Learned	N A

WASHINGTON	
Objective	**Comments**
A. Background	• Coastal Gross State Product is 46.9% of Total Gross Product • Major industries include tourism, fisheries and shellfisheries
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Pacific Ocean coast to 3 nautical miles; the Strait of Juan de Fuca, inland waters and shores of Puget Sound, 15 coastal counties • Local planning and regulation involve "marine waters, streams with greater than 20 cubic feet per second mean annual flow, lakes larger than 20 acres, and 200 feet landward of the ordinary high water line or the floodway, including all wetlands within the 100 year flood plain"
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions agencies • Between public stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• National Wetland s Inventory is complete with some of its data digitized into GIS; 2 other studies have use GIS • Federal consistency with the WCZMP is assumed if a project is granted 401 certification • State agencies must be consistent with local Shoreline Master Plans • Environmental Assessment is considered important because every proposed project goes through it; thus, it helps identify problems early in the process • Interagency Wetland Review Board is responsible for state wetland policy review • Local shoreline permits are used and applied for at the local level; if approved, WDOE is notified and can appeal to Shoreline Hearing Board (SHB) which acts like a special court; decisions can appeal those decisions to the Supreme Court or revise their proposal and reapply; local permit denial can also be taken to the Supreme Court • Shoreline Management Act Handbook proposed pre-application meetings • Department of Transportation and Department (DOE) of the Environment have a Memoranda of Agreement describing how they will coordinate on wetland issues dealing with non-tidal transportation impacts • State Wetlands Integration Strategy (SWIS) is an interagency committee that is involved in making improvements of wetland management • Interagency Wetland Review Board is modeled after SWIS and provides DOE with advice on wetlands issues

WASHINGTON	
Objective	**Comments**
	• There is a voluntary joint state-federal permit application process: one form used for local (Shoreline Management Act), state (Hydraulic Project Approval for actions in fish-bearing waters; 401 Certification) and federal (Section 10/404) • Clean Water Act Section 401 wetland water quality standards are considered important for state-level control • Local governments can apply civil fines; some federal agency involvement in compliance monitoring and enforcement • WDOE can acquire purchase shorelines and associated wetlands; assistance with funding for local governments, NGOs and agencies • WDOE has a 29 person staff that provides technical assistance and education for local governments
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Federal, state, NGOs and community groups worked together under the Puget Sound Water Quality Monitoring Plan to restore 50 acres of inter-tidal marsh; WDOE provided $25 000 of CZM funds • Education and awareness includes: publications; Wetland Section of the WDOE is provides technical assistance such as publications, model ordinances, other media and education for local schools, governments and the public
3. State Management of Entire Coast • As one unit or are there county programs or sub-components?	• Wisconsin Coastal Zone Management Program is based on the 1970 Shoreline Management Act (which establishes a locally-implemented planning and permitting system for all shorelines in the state) and associated city and county shoreline master programs that the already been approved by the Department of Ecology (WDOE); • WDOE is the lead agency; authorizes permits for wetlands activities in Shoreland Management Plans • Most local governments used WDOE's guidelines from the Shoreline Management Act (Natural, Conservancy, Rural and Urban Environments) in their Shoreline Management Plans • Department of Natural Resources manages state tidal wetlands
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• The Olympic Coast National Marine Sanctuary is in the coastal zone but there is no information relating to administration or management

5. Case Studies and Other Lessons Learned	• WDOE's strategy to enhance wetlands include involved providing a variety of assistance to the public
	  • Landowner Assistance- focussing on explaining how wetland regulatory process work to public and private landowners; involves publications of guidebooks
	  • Technical Assistance-focus is on local governments, WDOE staff, other state and federal agencies, and non-profit organizations, developing a hydrogeomorphic classification system and functional assessment methodology; Wetlands Stewardship Initiative, targets local governments and non-governmental land trusts and similar groups; many

WASHINGTON	
Objective	**Comments**
	publications available • Public Education: targeted to classrooms; includes curriculum development and teacher workshops on wetlands; videos and television announcements; publications • Oregon and California (and other states) have used these materials directly while some materials have been adapted

WISCONSIN	
Objective	**Comments**
A. Background	• 48% of the state population lives in the coastal counties, concentrated mainly in the City of Superior • Important industries to the economy include dairy farming, forestry, agriculture, and tourism; fishing has been detrimentally affected by pollution in lakes and over-fishing • 48 miles of the Lake Superior coastline are within Bad River Red Cliff Indian Reservations
B. Definition of Coastal Zone (Issue Defined or Geographically Defined?)	• Includes the land and water within the 15 coastal counties bordering Lake Superior • Includes Lake Superior, Lake Michigan and Green Bay to the state line
C. Management Approaches Contributing to Effective Public/ Stakeholder Involvement and Co-management or Joint Decision Making Processes	
1. Conflict Resolution, Coordination or Harmonization Processes • Between adjacent regions/agencies • Between public/stakeholders • Coordination with adjacent states • Information sharing • Any large-scale regional accords?	• Department of Natural Resources (DNR) maintains Wisconsin Wetland Inventory (National Wetland Inventory does not exist); this is used for wetland change monitoring; DNR uses a GIS system, all counties have digital data for wetlands; DNR keeps permit tracking databases • Memoranda of Understanding exist between DNR and Department of Transportation; various interagency agreements were incorporated into the development of the Wisconsin Coastal Management Program (WCMP); there is a state-federal agreement relating to classifying and delineating wetlands on agricultural lands • Federal consistency enforceable policies are the same as some DNR permit requirements; therefore, if the permit has been issued then, federal consistency is assumed • State consistency requirement is not enforced
2. Partnering Arrangements (State/Private Sector) to Achieve Goals of Program?	• Extensive awareness and education campaign includes school curriculum; training on wetlands ecology, delineation and functional assessment; May is designated as "Wetlands Protection Month"; schools in coastal counties have an "Adopt-a-Wetland" program (e.g. in producing a visitor's guide, students may plant or do insect surveys) • Nature Conservancy owns and manages the Mink Estuary

3. State Management of Entire Coast
• As one unit or are there county programs or sub-components?
	• Though the WCMP is administered by the Department of Administration, Department of Natural Resources is the key implementation agency for wetlands protection in the WCMP
	• Responsibilities of the Department of Natural Resources
	  • Permitting relating to waterway construction or alteration
	  • Oversees local zoning and permit decisions on shorelands
	  • Reviews and certifies federal CWA Section 404 wetland permits for compliance with state water quality standards

WISCONSIN	
Objective	**Comments**
	under CWA Section 401 • Provides technical assistance to land owners, promoting wildlife use of their wetlands • Wetland acquisition • Involved in the Upper Mississippi/Great Lakes Joint Venture (North American Waterfowl Plan), a wetlands restoration plan • Wisconsin Coastal Management Coastal Management Council provides the policy direction for the program (includes 29 members from state legislators, local officials, citizens, tribal governments, state agency representatives and University of Wisconsin representatives • Local Governments contribute to wetlands protection thorough zoning and permitting authorities
4. Linkages to Marine Protected Areas and Similar Programs (State or Federal) How well integrated and coordinated are they?	• Special Area Management Plans are not being used • WCMP is striving to define special areas to facilitate federal consistency determinations • WCMP lists 6 (undesignated) areas of management concern
5. Case Studies and Other Lessons Learned	N/A

Summary

The coastal zone generally includes lands and waters from the territorial limit of three (nautical) miles (Puerto Rico limit corresponds to three nautical leagues) to an inland boundary, which may correspond to political boundaries (i.e. international, state, county, municipal boundaries), administrative boundaries (e.g. nearest road way) functional boundaries (e.g. important environmental areas, estuaries or wetlands, 100 year flood level), or a mixture of both. Many states also conduct a tiered approach to coastal zone management, usually involving two tiers (e.g. Commonwealth of Northern Marianas, Connecticut, New Hampshire, South Carolina, and U. S. Virgin Islands). The first tier would be the area with the most direct interaction with the coast (e.g. the Area of Focus in Maryland) or the zone of primary influence (e.g. New Hampshire) . Tier 2 includes the rest of the coastal zone. Tier 2 may be considered a zone of secondary influence and has a slightly different focus than Tier 1. For example, the focus in Tier 2 in Maryland is on major facilities, while Tier 1 focuses on impacts associated with permitted activities) Rhode Island has a three tiered approach to coastal zone management. This includes a zone of primary influence, one delineated by the boundaries of coastal counties and a third that includes the entire state in the coastal zone.

The states generally do not administrate their coastal zone management programs as one all encompassing unit. Rather, the implementation of the coastal zone program is divided to various state and local authorities, overseen by a coastal zone management program lead agency. Some states separate their coastal zone into regional zones which may be individually managed. For example, California's coastal zone is divided into the San Francisco Bay Area, managed by San Francisco Bay Conservation and Development Commission , and the California Coast, managed by the California Coastal Commission, with few overlaps. The California State Coastal Conservancy provides an overall non-regulatory role for the entire coastal zone.

There is widespread use of state-local administrative relationships in coastal states. Local (e.g. county or municipal) authorities create local coastal zone management programs and may be involved with local permitting and enforcement. These programs and activities require some level of oversight or

approval from the state. For example, local parishes in Louisiana develop coastal management programs which are approved at the state and federal level. In New Hampshire, local Conservation Commissions can comment or intervene with state permitting relating to their own area. Local waterfront revitalization plans can delineate their own boundaries in New York. This can change the boundaries of the state's coastal zone. Local Wetlands Boards have permitting authority in Virginia.

The use of Special Area Management Plans (SAMPs) is also widespread and occurs in most of these state coastal zone management programs. SAMPs are used to protect mangrove areas in American Samoa. California has seven SAMPs, including San Francisco Bay. The Area of Particular Concern program in the Northern Mariana Islands is similar to a SAMP. Geographical Areas of Particular Concern, wildlife refuges, areas of environmental concern and similar programs are also sometimes identified to facilitate protection of wetland or estuarine resources. These are used in areas that are particularly vulnerable to human uses and activities. There is very little information available from the state profiles regarding the use and administration of Marine Protected Areas.

Each state's coastal zone management program typically involves a network of agencies and authorities working together to achieve the goals of the program. A variety of tools have been utilized to help facilitate coordination within the state. Coordination tools include joint state-federal permit applications or notices, interagency or pre-application meetings, and Memoranda of Agreements. Most states have comprehensive mapping and inventory programs as well as databases used in the permitting process. For example, most states are involved with the National Wetlands Inventory, or they have a similar program. Very little information is given describing management coordination between adjacent states. The North Eastern States, (i.e. Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Virginia) have an interstate group that meets four times per year. They are also working on a North Eastern State-wide functional assessment process. There is no further information available on coordination between these states. With very few exceptions, no indication is given on which natural resources are shared between adjacent states.

State (or territory) and federal consistency are important elements to all coastal zone management programs that effect estuarine waters and coastal wetlands. This requires that federal or state

activities are consistent with the requirement and policies of each approved state coastal zone management program. Section 307 of the Coastal Zone Management Act of 1972 describes federal coordination and cooperation requirements of the coastal zone management program (http://www.nos.noaa.gov/ocrm/czm/ CZM_ACT.html). Federal consistency relates to activities conducted by a federal agency or contractor for a federal agency) or indirect federal activities involving federal funding or requiring federal permits or licenses (e.g. U.S. Army Corps of Engineering, Clean Water Act Section 404 and Section 401 permits). In each state, the lead coastal management program agency reviews federal activities to ensure that they comply with its coastal zone programs. In this way, potential conflicts between the state (or territory) and federal agencies are resolved. At the federal level, the National Oceanic and Atmospheric Administration provides technical assistance to, and is involved with conflict resolution among, state and federal agencies (http:/ www.nos.noaa.gov ocrm czm federal_consistency.html#anchor76966).

Several programs and initiatives described in the state profiles are worthy of special attention Northern Mariana Islands' Public Land Exchange Act Program had an interesting approach to wetlands protection. The state would exchange undevelopable private land with public uplands. This was considered highly effective at wetland protection. (However, there was some environmental disbenefit associated with land leased to Division of Public Lands for grazing and pig farming.) In this way development was allowed to occur while protecting ecologically highly valued lands. Maryland's non-structural Erosion Control Program is a unique program that has resulted in a positive influence to wetlands protection. Run by the Department of Forestry, it provides a 50-50 matching grant for property owners to share the cost of designing and implementing non-structural erosion control projects. This involves planting marsh grasses to control erosion and results in the creation of fringe marsh habitat. These types of projects have become more popular than traditional structural methods. Alabama's Department of Environmental Management works with developers to locate development away from sensitive areas on a given property. Alabama also practices a form of forestry that cuts trees above ground level, allowing the stump to rapidly regenerate into a healthy tree. American Samoa's Village Liaison Facilitator Program effectively maintains a village centered traditional government while

incorporating centralized regulations. It involves each village selecting a liaison while the coastal zone management program selects the facilitator and allows effective discussion of issues and resolution of conflicts.

Another unique approach is Rhode Island's recording of permit violations on the property deed when there is a permit violation. This results in banks not giving mortgages to these properties until the required restoration is competed. Oregon's Estuarine-Shoreland Planning program, which provided for integrated local shoreline-estuary planning, is worthy of special attention because its planning policies have gained popular acceptance as management strategies in the United States and in other places. These have also helped develop the Special Area Management Plan concept used all over the world. Finally, Washington has an extensive public assistance campaign (providing landowner and technical assistance and public education) to promote its coastal zone management program. Oregon and California (and other states) have used these materials directly while some materials have been adapted. Further investigation of these programs may provide special insight to integrated coastal zone management in Canada.

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